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SURGERY OF THE TONSIL WITH PULMONARY ABSCESS AS A SEQUEL*

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Pulmonary abscess following tonsillectomy is one of the most grave sequellae in surgery of the tonsils. Fortunately, it has not been of frequent occurrence. In view of the vast number of operations that have been done upon the tonsils during the past ten years, the number of cases of pulmonary abscess as a result of the operation that have been reported are comparatively few. How many cases have occurred which have not been reported, or that may have gone by unrecognized, we have no means of knowing.

That it is a very grave possibility in all tonsillectomies will not be denied. A most thorough investigation as to its cause, with the hope of finding some means for preventing its occurrence has been the purpose of this study, as it is our hope that with this discussion some new light may be shed upon this rather perplexing problem.

Medical literature offers but little in the discussion of this subject. Frank reports three cases in 1917 and states that the great majority occur after operations done under general anaesthetics in young adults from twenty to thirty-five years of age.

In the three cases reported by Frank, examination of the fauces revealed incomplete or destructive operative results. Two of the cases give distinct history of post-operative bleeding. According to this writer, the majority of the lesions are aspiratory in origin as evidenced by the location of the abscess, or they may be due to a septic embolism. In any case he believes they are largly preventable. In Frank's opinion a more general use of local anaesthetics for tonsil surgery with the abolishment of the rapid tissue destroying operative methods and a respectful attitude towards hemorrhage will do much towards the prevention of this grave misfortune.

Lewis, in 1918, reported seven cases of lung abscess following tonsillectomy, he expresses the opinion that they are caused by aspiration of pieces of tonsil during operations under general anaesthetics. Simpson and Noah, in 1920, report two cases following tonsillectomies under local anaesthetics and thus they contend that aspiration of infected material during operation could not account for these cases. These men conclude that the condition is the result of a blood stream infection. That during or following operation, septic material enters the veins, passes through the heart to the lungs and finds suitable soil for the production of an abscess. The various reports of lung abscess following other surgical procedures, especially gynecological operations, when aspiration is quite impossible, would help to strengthen the above theory. From our study of the literature upon the subject, we find:

(1) That the largest per cent of the cases occur where the operations are done at clinics or in charity hospitals.

(2) That a general anaesthetic has been used in a larger per cent of the cases. This of course may be due to the fact that general anaesthesia is much more generally used for tonsillectomies.

(3) That incomplete operative work with the bruising of the tissues of the throat by the use of rapid tissue destroying operative methods and a careless attitude towards hemorrhage, may be responsible for this sequellae.

(4) That these abscesses are due either to the insufflation into the lung of infected material, or the taking up of the same by the injuried veins of the throat either dur-

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ing the operation or after it has been performed.

During all his years as a laryngologist, the writer is fortunate so far in never having had this complication following his surgery of the tonsil.

During the last three years, however, three cases have come to his attention in the two hospitals of the city where he has service. However, ever since the first reported case, several years ago, the gravity of this possibility has called forth the most careful thought and study of a cause for, and a prevention of this unfortunate complication.

As a result, our convictions in the matter are very positive and we think our conclusions are accurate.

As to the cause of lung abscess following tonsillectomy, we believe that they come as the result of the insufflation of infective material into the lung from the throat during or after operation. This material may originate in the nose, pharynx, gums, teeth, or the tonsils themselves, or from infected material taken up by the wounded veins at the time of operation, which is carried into the lung as an infected embolism.

It is our opinion that the form of anaesthetic has but little, if anything, to do with this misfortune, except as prolonged etherization might render the lung tissue less vulnerable. Even this is very doubtful. The suggestion in one of our recent A. M. A. journals that it was caused by the ether spray, and suction machine is not, we believe, deserving of consideration.

Being early convinced as to the source of these pulmonary infections, and the manner by which the infection was carried to the lung, our attention was at once called to the study of some method of procedure that would prevent this grave possibility. As with Frank, we believe that lung abscess following tonsillectomy is absolutely preventable where there is positive assurance that there was not pulmonary infection before the operation took place.

The whole matter is based upon care in the technique of operating these cases, beginning with the preparation of the throat, the anaesthetizing of the patient, the method of operating and the proper care of the patient after operation.

Tonsil surgery, on the whole, has been done with an abandon that is positively startling, and the wonder is, that the records do not reveal a much greater amount of grave misfortune. Every laryngologist, however, knows from his daily observation of throats, that a vast majority of the very serious results never come to light, and the unfortunate victims are passed along, wondering why their throats should feel as they do ever since they had, or were supposed to have had, their tonsils removed.

Even laryngologists, we fear, do not always appreciate the magnitude of a tonsil operation and the necessity of its being done with the utmost precision and accuracy. They have not given sufficient care to the study of the tonsil and its adenxia, in an effort to remove it with the least possible disturbance to the surrounding tissues. Some are still operating in a pool of blood and as quickly as they can get through, turning the patient upon the face, as they say, "to let him drain," or they are using crushing instruments with which they boast of how rapidly and bloodlessly they can crush the tonsils out, only to find that in many instances, by the time they are gotten to their rooms, and while still relaxed from the anaesthetic so as to insufflate everything that may appear in the throat, they begin to bleed most freely. This has never appealed to the writer as good surgery, and still its one time popularity almost made him wonder whether some ingenious surgeon would not devise some crushing device for amputating fingers and toes, in view of the fact that it could be done so quickly, and for the time being, so bloodlessly, and was so much less laborious than clean careful dissection, as called for in the ordinary method of amputating fingers and toes.

It is the opinion of the writer that tonsils should be removed by careful clean dissection always in the line of natural clevage, without the slightest injury to any of the surrounding tissues in the throat. No where else would we think of doing nice dissection with a blunt instrument, neither should we attempt it amid the fragile and easily torn structures of the throat, but always with keen edged dissectors. We shall describe to you as briefly as we can our method of doing tonsillectomy with a view of avoiding later complications such as pulmonary abscess.

In most instances, we use general anaesthesia. Partly because the majority of our patients are children and partly because we prefer it. The method of administer-

ing the anaesthetic is of extreme importance, however, and for that reason we employ a regular anaesthetist for this work, who gives all our anaesthetics. The anaesthetic should be given **slowly,** especially at the outset, so as not to stimulate the rapid formation of secretions within the throat. It is remarkable what a difference it makes. It was our custom formerly to use atropine before the anaesthetic, now we never do, and the secretions rarely are annoying. Should we hear a gurgling in the throat from excessive secretions, it should be removed by suction, even while the patient is being anaesthetized, as these secretions may contain infected material which may be lodged deeply in the lung at this time, and be the source of later trouble. The patient should be thoroughly relaxed and the reflexes of the throat abolished while we are operating, but they should not be over anaesthetized. This is where your special anaesthetizer for throat work is of value. He comes to know just when they are in proper condition to operate. During the operation, we use the ether spray and suction, the anaesthetizer knowing just how much of the spray to use during the entire time.

The mouth gag in place, the throat is gently wiped out with steril water or a mild antiseptic and a small catheter is placed through the nostrils and brought out through the mouth over the upper teeth and the ends passed under the loop across the septum of the nose, brought up so as to raise the soft palate taut and clamped in place with a hemostat. Beck, of Chicago, suggested the use of the catheter some years ago, having the anaesthetizer hold the ends and for the express purpose of exposing the naso-pharynx and adenoids. We use it to put all the pillars of the fauces at slight tention, and so retain all the parts of the throat in the same relative position through the entire operation. It does also help to expose the naso-pharynx. Its value in facilitating operative work, clean dissection, etc., however, can never be appreciated unless it is tried.

We seize the tonsil deeply and firmly with a narrow pronged tenaculum, being very careful not to grasp the tonsil plica at any point. If any material exudes from the tonsil when we grasp it with the tenaculum, we are careful to wipe it all away so it may not pass into the lung. With a keen-edged, straight knife and with the tonsil pulled well out so as to put the plica and pillars on the stretch, we slide the knife under the plica and the tonsilar pillar between these and the tonsils allowing it to simply follow the line of cleavage. The only tissue you must cut is the basement membrane of the inner fold of the plica which becomes the capsule of the tonsil. There may be inflammatory adhesions, but if you follow the line of cleavage these cause very little bleeding when separated by a sharp knife. The capsule of the tonsil is separated from the aponeurosis forming the tonsil fossa by the use of any ordinary dissector and the mere base of the tonsil is removed by a tonsil snare.

As soon as the first tonsil is removed, place a gauze sponge previously made up, about the size and shape of a tonsil, down into the fossa before any bleeding has taken place. This is left in position while the other tonsil is removed and a similar gauze sponge placed in its fossa and left until after the adenoids are removed. Great care is exercised in removing the adenoids that the blood is not insufflated. While the adenoid tissue is being removed, the suction is placed below it and just above the larynx. As soon as the adenoid tissue is removed with the adenatome, a gauze pack of the proper size, previously prepared, is quickly placed up into the naso-pharynx. Any debris or clotted blood which may be present is then gently wiped from the mouth and throat and after about 1 1-2 to 2 minutes, all the sponges are removed from the tonsular fossae, and the naso-pharynx, when in a large percent of the cases the throats are dry. If there is oozing from one of the fossa we replace a sponge for a minute or more. If not, we carefully inspect all the fossae to see that they are clean and then paint each of them with compound tincture of benzoin.

If we have done a perfect operation, not only the pillars of the fauces are perfectly intact, but over their margins is a double fold of mucous membrane which is absolutely uninjured and which drops down into the tonsillar fossa. These folds are the uninjured tonsil plica. The tonsillar fossa is smooth and looks as though it were covered with an unbroken membrane. The coalesced aponeurosis of the muscles which form it, and beneath this smooth surface you can often see the larger plexus of veins which lie beneath the base of the tonsil and which are so often wounded by careless operation, causing severe hemorrhages and

the possibility of an infected venous embolus.

The operation complete, the patient is put into bed lying upon the face while the nurse is cautioned to observe them carfully until they are sufficiently awake so as not to insufflate anything from the throat into the lungs.

The following points are observed by this method of operating so as to prevent pulmonary abscess.

(1) Care that the patient does not have excessive excretions from the nose, nasopharynx, throat and mouth during etherization, which material may contain infection and be insufflated into the lungs.

(2) Care that no a single structure in the throat is bruised, torn or cut during the dissection, all dissections being done with sharp instruments in the natural line of cleavage even the tonsular plica being preserved intact.

(3) Properly made gauze sponges are placed in the tonsular fossa immediately after the tonsils are removed to prevent the least blood escaping into the throat which may be insufflated. The clean dissection in the line of cleavage does not mutilate the blood vessel or any of the surrounding tissues. The same care is taken in the nasopharynx.

(4) The throat and mouth is thoroughly cleaned and inspected to be sure all the fossae are dry and in good condition and the fossae painted with compound tincture of benzoin to seal the mouths of the blood vessels and prevent, so far as possible, their taking up infected material after the operation.

(5) The aponeurosis beneath which is the tonsular plexus of veins is left perfectly intact, forming a complete smooth surface at the bottom of the tonsular fossae and leaving all these large veins unexposed for taking up infected material.

(6) The patient is so placed after the operation that any secretion which may collect in the throat will not be insufflated and guarded carefully by a nurse until they are sufficiently awake that the reflexes of the throat are active. It is the writer's firm conviction that if the laryngologist will give the proper consideration to his technique in all his cases of tonsil surgery that this very serious complication may be entirely avoided, and pulmonary abscess following tonsillectomy will become a thing of the past.

EYE INJURIES WITH SOME CASE REPORTS*

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Injuries to the eyeball are one of the most important types of cases that an oculist has to care for, because of the symptoms and dangers that present themselves.

The injury may be due to contusion or penetration of the eye by some foreign body and may involve the cornea, sclera or both with the underlying structures, often times causing impairment of vision if not total destruction of the eyeball.

Contusions of the eye may injure any part of it and varies in degree of severity from an ecchymosis of the conjunctiva to a rupture of the eyeball.

A penetrating wound may be an incised, lacerated or punctured one and the further back the tissues of the eye are involved, the more serious the case becomes. A small wound of the cornea may heal with no impairment of vision, while a similar wound at the corneal scleral junction or of the sclera, may cause loss of vision, if not the complete destruction of the eyeball.

Similarly, the aqueous humor may be almost totally lost and vision return to normal when the wound has healed, but the loss of any appreciable amount of vitreous causes impairment of vision, because with this loss of vitreous there may be prolapse of the uvea into the wound or detachment of the retina.

In every case of a pentrating wound, the condition is serious and unless the object penetrating the eye is known and is found intact, the question of whether or not a foreign body remains in the eyeball is one which must be determined, if possible. To locate this foreign body, we must rely upon direct examination, the ophthalmoscope or the x-ray and if there is hemorrhage into the eye or the media are cloudy, inspection of the eye is often rendered impossible.

A case illustrating contusion of the eyeball is the following: A young man, while hunting quail, was accidentally shot by one of his party. He was struck by several

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shot and the left eye immediately became blind.

Patient was seen by me about two hours after accident and examination showed a small lacerated wound in upper lid of left eye. The lid was swollen and ecchymotic. The anterior chamber of eye was filled with blood and the bulbar conjunctiva of the upper outer part of eyeball was also ecchymotic. Vision was light perception.

Upon fluoroscopic examination, a small round body was seen directly behind the lacerated wound in lid. As the shot did not move with the movement of the eyeball, it demonstrated to us that it must be outside of the eyeball proper and therefore in the tissues above the eyeball.

The shot was removed under local anaesthesia and the eye soon returned to normal condition. The shot did not strike with sufficient force to enter eyeball, after passing through eyelid, but contusions of eyeball with hyphemia resulted.

Another interesting case of contusion of eyeball is that occurring to an infant at delivery. The child was brought in eight days after birth with the following history: The day after delivery the left eye became prominent. This protrusion of the eye gradually increased, as did a swelling of the left temple. Examination showed marked exophthalmos of left eye. The cornea showed a small opacity. There was a fluctuating tumor about one inch behind external angle of left orbit. Upon pressure on this tumor the eye became more prominent.

The tumor was incised and dark blood evacuated. A probe was passed through the temporo-frontal suture and a considerable quantity of dark blood escaped. Upon withdrawal of probe, the eye immediately became less prominent, but the following day the exophthalmos was about the same as upon entrance. The probe was again introduced as before, but practically no blood was evacuated at this time. Due to lack of protection, the cornea ulcerated and a panophthalmitis developed, requiring enucleation. The child made a rapid recovery.

While this trauma did not at first affect the eye so much itself, the post-orbital hemorrhage resulted in the destruction of the eyeball. It is also interesting because of the escape of blood through the temporo-frontal suture.

In any severe injury of the eye, an iridocyclitis usually results if prompt treatment is not rendered. There may be a panophthalmitis develop from an infection introduced into the eye by the foreign body or it may enter through the opening thus caused. In iridocyclitis there is the production of a plastic exudate which may extend into the vitreous and ultimately becoming organized, may shrink and produce atrophy of the eyeball. The following case which came to the Clinic four months ago, well illustrates this condition.

A boy found some dynamite caps and while knowing what they were, he was not satisfied until he had exploded one with the loss of two fingers and severe trauma to the right eye. He was seen by me twenty-four hours after the accident. The upper lid of right eye was red and swollen and the conjunctiva was ecchymotic. There was a laceration of the corneal scleral junction with protrusion of the iris. The anterior chamber was filled with blood and the vision was nil.

The iris was excised and atrophine instilled daily. X-ray was negative for foreign body. It was two months before the inflammation of the eye disappeared. There was very little pain except on pressure on eyeball. As the inflammation subsided, the tension of eyeball gradually decreased until now the eyeball is considerably smaller in size, and tension greatly lowered. Enucleation of this eye is no doubt the proper procedure, but this the patient refuses.

Another case with practically the same size wound of cornea and slight prolapse of iris, but without the severe contusion suffered in previous case, healed with practically normal vision. A woman, while breaking up a plate to feed chickens, was struck in left eye by a piece of the plate. Patient was seen by me two weeks following injury. The eye showed no evidence of inflammation. There was a laceration of cornea just below the center point with adherence of the inner margin of the lower portion of iris, into the wound. This prolapse distorted the pupil and interfered with vision.

Atrophine was instilled in eye and good dilatation of pupil secured. The eye was then cleansed and with a spatula the wound was re-opened and the iris freed and allowed to withdraw. The wound healed and the iris remained free from it. The eye now appeared normal with no interference of vision.

If there is a foreign body in the eye, we

have a condition which is always serious, usually causing at least the loss of vision in the injured eye and oftentimes resulting in the destruction of the eyeball. Of course, if there is a foreign body present, a reasonable attempt should be made to remove it, but this failing, the only safe procedure is enucleation. For while in a few cases a foreign body may be tolerated for a time, it usually produces an inflammation which may not only affect the injured eye but also the other eye, by a sympathetic involvement.

An interesting case of this type of injury is the following: A young man, while repairing an automobile, was pounding a file with a hammer, when he suddenly felt a sharp pain in his eye. This pain soon became only slightly noticeable and the following day he consulted his family physician who examined the eye and told him he could see nothing in it and that it would probably cause him no further trouble. He had no more trouble with it for about five weeks, when inflammation developed and pain became severe. He was referred to us by his family physician and examination showed the following:

Right eye, vision normal. Left eye, the injured eye, vision 15-20. Ophthalmoscopic examination showed a foreign body apparently in the nasal side of lens and a small opaque area about it. An attempt to extract it with a magnet failed, probably because of the scar tissue formed about it. The following day vision had decreased to 15-40. Being unable to extract the foreign body with the magnet, a capsulatomy was done with extraction of the lens the next day. The lens contained a small spicule of steel about which there was considerable rust formation. The inflammation soon subsided and has caused no further trouble in two years.

The above cases are a few of the different types of cases one sees in his practice. Many of the cases do not come in immediately following the accident but wait until severe symptoms set in before consulting an oculist. Each case is a study in itself and no routine treatment will suffice.

INDUSTRIAL OPHTHALMOLOGY*

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By far the greater part of industrial ophthalmology deals with the treatment of minor injuries, of which the majority are foreign body cases. Although the severe injuries and their treatment are the most interesting phase of industrial ophthalmology, the most important part of the work is the treatment of the minor injuries. The care of these patients involves several important factors.

The ideal method of handling such cases, would be to have the foreign body removed at once. In most cases it is found that not only the foreign body but also stained and devitalized corneal tissue must be removed. Unless this is done the eye remains irritated for some days and is more liable to ulceration. A Graefe knife is used to remove the foreign body after cocain anaesthesia. In all cases, immediately after the removal of the foreign body, mercurochrome is instilled and a triangular pad of gauze with adhesive strips is placed over the eye. The patient is advised to leave the pad undisturbed for twelve hours at least, preferably twenty-four hours. If the irritation is marked, it is necessary to seal the eye for a longer time. If the eye is not comfortable after removal of the pad, the patient is instructed to return for further attention. In most cases, the eye is comfortable and no further treatment is necessary. After being treated, the patient is allowed to return to work and is given some type of work suitable and safe for a man wearing a pad. It is surprising how rapidly nature will fill the gap and cover it with epithelium.

I believe that the occlusion of such eyes is of great value and that it plays an important part in the prevention of corneal ulcers. There are three reasons for such a measure. First, the corneal tissue normally does not have any blood vessels but receives its nourishment by osmosis; second, the closing of the eye prevents the admittance of infection through the dust coming in contact with an open wound; and third, movement of the eye causes discomfort which is minimized by a compress bandage.

The most troublesome cases to me have

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been those who have received first aid by a fellow-workman who has endeavored to remove foreign body. Unskilled attempts to remove deeply embedded foreign bodies do more harm than good.

After a corneal abrasion, with loss of considerable of the epithelial layer upon sealing the eye, it is surprising how rapidly the destroyed epithelium is reformed. A patient with denuded area comes complaining of the eye being painful. After cleansing under anaesthesia, and the instillation of mercurochrome and the sealing of the eye, the pain ceases.

In all cases in which the history of the accident or the appearance of the injury is such that an intra-ocular foreign body is suspected, a roentgen-ray localization should be invariably made.

In the treatment of corneal opacities following injury, the long continued use of ethyl-morphin-hydrochlorid (dionin) in some cases gives good results.

Success in having men report promptly for the treatment of injuries depends altogether on educating the superintendents and foremen to an understanding that such promptness is essential. By reason of the mandatory wearing of goggles and the use of the various other safety devices, major injuries of all types would be rarely seen.

Case Report

Mr. P. K. S., 37 years of age, boiler-maker by trade, was referred to me, complaining of monocular diplopia, polyopia and distortion of objects. One month previous, while working a piece of steel lodged in cornea of right eye. Owing to the fact that an oculist was not available at the place, the foreign body was not removed until six days later. In the meantime, the vision in the eye was much reduced and there was considerable pain. After removal of the steel, his vision in this eye improved somewhat but has remained stationary the last two weeks prior to consulting me. On examination by oblique illumination with a binocular loupe under strong illumination, a faint opacity of the cornea was seen in the lower temporal quadrant of the pupillary area. The opacity was very faint, a translucent bluish-white with outlines altogether hazy. The cornea looked like ground glass permeated with striae. With a dilated pupil which brought more of the scar into play, the symptoms were more marked, and with the stenopeic slit at 135 degrees which excluded most of the scar, the subjective symptoms were less marked. These tests were made to determine whether or not he was malingering. The retinoscope light reflex was too indefinite and the trial case was uncertain. The opacity was the result of ulceration with scar tissue formation due to the recent foreign body in the eye. This case emphasizes the necessity of the prompt removal of foreign bodies to prevent ulceration and scar tissue formation as much as possible. The eye had to be excluded from the field of vision with a frosted glass after the well known remedies had failed to clear the opacity.

The real cause of the disturbance of vision was due to diffusion of light and irregular astigmatism produced by the corneal facet. The irregular astigmatism was due to irregular curvature of the corneal surface which was present at the site of the scar. In consequence of the irregular astigmatism, objects appeared indistinct, distorted and double and multiple.

My object in presenting this subject is to emphasize the importance of the after dressing and care to obtain the most rapid healing and a minimum scar after removal of foreign bodies from the cornea. This case is reported because of its interest and because of the rare occurrence of the condition. I have found none such reported in recent ophthalmic literature with which I am familiar.

FACIAL DEFORMITIES AS A RESULT OF ADENOIDS*

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The subject of adenoids is an old one, and it would seem quite unnecessary to go over it again; consequently, I will make this paper as brief as possible—in fact, only an introduction to some slides which I would like for you to see.

There is a borderland between the work of the rhinologist and that of the orthodontist, which has been but lightly touched upon by either; this is too bad, for there is much which the two sciences have in common, and there should be closer harmony and union between them.

We of the Medical profession know that

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a normal breather is more healthy than an abnormal one. We know that nature intended all of us to breathe through the nose, and how this organ, with its wonderfully constructed mechanism prepares the air for the lower respiratory tract by filtering out the dust particles, moistening and at the same time warming the inhaled air, so that it is always delivered to the lower respiratory tract at an even temperature. Consequently, the normal interchange of oxygen and carbon dioxide gasses can take place in the lungs with the least irritation to the delicate mucous membrane linings of the mouth and throat. With the proper nasal breathing, we have the proper interchange of gasses taking place in the lungs, the blood stream is well oxygenated, resulting in a normal digestive tract and the proper functioning of all organs in the body.

All of this, however, is changed when, for some reason or other, the natural upper respiratory tract is obstructed and the individual becomes a chronic mouth breather. We will only touch on this condition in early childhood and young adult life.

You are all familiar with the etiology and symptoms of adenoids and I will not take up your time by repeating them; it is sufficient to say that most of the cases start with an acute coryza when about two or three years old, the acute condition becomes more or less chronic, the lymphoid ring becomes congested and a hypertrophy of the adenoids is the result. The post nasal space becoming clogged and filled with the over grown tissue. This child from necessity becomes a mouth breather, and right here is where the trouble begins; at this point the patient loses all the normal forces of occlusion; such as muscular pressure of the lips, atmospheric pressure, and the normal pressure of the tongue on the lateral sides of the upper arch of the mouth.

The current of air striking the roof of the mouth (or hard palate) causes the upper or maxillary arch to become high, the loss of the muscular pressure of the tongue causes the arch to remain narrow, while the muscular pull of the lower lip on the upper front teeth being absent, they are allowed to shoot forward and protrude. The mandible (or lower jaw) is not pushed forward, and the lower lip drops under the upper front teeth and becomes thickened from irritation, at the same time allowing the back teeth to assume a distal position.

You are all familiar with the harsh and dry mucous membrane found in the mouth and throat of this type of case, as well as the chronic tubal inflammations which are a constant symptom of adenoids.

If this condition exists through the period of second dentition, our operations for adenoids are positively of no benefit to the patient, unless we can establish normal breathing, and to do this, in most cases, we require the assistance of the orthodentist to widen the arches, bring the lower jaw forward, the superior maxillary bones are widened, thereby allowing the septum—which in most instances is deviated, due to lack of room in the small nasal cavity—to straighten out, and the nasal spaces become normal.

The habitual mouth breather, in nearly every instance, is undeveloped both mentally and physically. Under oxygenated, they sooner or later develop gastro-intestinal disturbances which usually lead to auto intoxication and is the one first to be taken with all the diseases of mankind.

In the examination of school children, we find approximately ten per cent of the children with this type of case. Accordingly, we should find about the same number in adult life. Dr. McCarty and I counted one thousand adults passing the corner of fourth and main street and found only eight of the entire number with this type of case.

It is now time that we, as physicians, awake to the condition confronting us, and be just a little more careful in our examination of these cases, discharging them only when we are sure that normal breathing has been re-established.

We must realize the importance of removing all nasal obstructions, no matter how young the patient may be, and then if we are unable to get the patient to resume normal breathing, our work will be of no avail, unless placed in the hands of an orthodontist, and he in turn widens the arches of the mouth, and assists to restore the normal facial balance to such an extent that the patient is enabled to breath normally. We, as operators, are condemned when the operations fail to bring about the desired result, when had we explained to the parent beforehand that probably the patient would need the assistance of an orthodontist, they would understand.

The Assistant Superintendent of the insane Hospital at Vinita, tells us that over sixty percent of the imbecillic insane at that

place are of this type of case. Also we are informed that the ratio is about the same in the Institute for Feeble Minded Children at Enid.

The thing I wish to emphasize in this paper is: Establish normal breathing, regardless of the method you have to use; do not condemn a child by your own carelessness to mental backwardness and social ostracism. They are entitled to the benefit of all we know; give it to them.

Investigators along this line tell us that an abnormal breather has not one chance in ten with a normal breather.

I will ask Dr. McCarty to run his slides of this type of case and you will see some of the benefits derived by mechanical treatment of these facial deformities.

WASHINGTON MEETING OF THE SOUTHERN MEDICAL ASSOCIATION

The Southern Medical Association will hold its seventeenth annual meeting at Washington, D. C., Monday, Tuesday, Wednesday and Thursday, November 12-15, 1923. Dr. W. S. Leathers, Executive Officer, Mississippi State Board of Health, Jackson, Mississippi, is President.

This meeting will be made up of twenty sections and conjoint meetings—the programs of these meetings will cover every phase of scientific medicine and surgery. (See marked bulletin for names of sections and conjoint meetings.)

The President of the United States will receive informally the members of the Southern Medical Association and their wives, Thursday, November 15th, at 12:30 p. m. at the White House. Of special interest to the ladies will be the reception at the Washington Club on Tuesday afternoon where Mrs. Woodrow Wilson will be the guest of honor. The usual reception to the President of the Southern Medical Association will be held on Tuesday night at the New National Museum, one of the most beautiful public buildings of Washington, a detachment of the Marine Band furnishing the music. Other special entertainments being received.

At the first general session on Monday night, in addition to the address of the President, Dr. Leathers, there will be an address by Dr. Geo. E. Vincent, President of the Rockefeller Foundation, New York, N. Y.; Oration on Public Health by Dr. W. S. Rankin, State Health Officer of North Carolina; Oration on Medicine by Dr. Stewart R. Roberts, Atlanta, Georgia; and Oration on Surgery by Dr. J. W. Barksdale, Jackson, Miss.

A joint dinner by the Section on Surgery and the Section on Radiology, as well as a number of section dinners, will be interesting features of Tuesday evening. The Alumni Reunions which promise to be an outstanding feature of this meeting will be held on Wednesday night and it is expected that there will be large groups present from all of the leading medical schools.

Physicians who golf are urged to bring their clubs. There will be a golf tournament at which the usual prizes will be offered. Play will be over the championship course of the Columbia Country Club.

The University of Virginia Hospital, Charlottesville, have already announced special clinics for Friday and Saturday following the meeting. While no definite announcement has been made yet, it is anticipated that Johns Hopkins and the University of Maryland will arrange clinic programs for Friday and Saturday following the Washington sessions.

Washington has many splendid hotels and everyone is assured of comfortablee accommodations this year. Special reduced rates have been granted by railroads on the certificate plan. Each member of the Southern Medical Association will receive a certificate without application for it. Any physician who is a member of his state and county medical society although not a member of the Southern Medical Association, who desires to attend this meeting, can have the benefit of these reduced rates by requesting a certificate from the Association office.

SOUTHERN MEDICAL ASSOCIATION

The Seventeenth Annual Meeting at Washington, D. C., November 12-15, 1923

Railroad Rates and Accommodations

The following communication to the members of the Oklahoma State Medical Association desiring to attend the annual meeting of the Southern Medical Association, at Washington, D. C., November 12th to 15th, from the Southern Railway System, is published for the information of all concerned:

For this occasion reduced rates have been arranged. To those provided with "Round Trip Identification Certificates," there will be sold November 8th to 14th, inclusive, round trip tickets to Washington, D. C., at one and one-half fare (from Memphis $50.36, from other points in propor-

tion). Tickets when validated at Washington any day November 12th to 23rd will be good to return to starting point provided such starting point is reached before midnight of November 23rd, 1923.

Two routes are open to you.

1st. The Memphis Special via Chattanooga, Bristol and Lynchburg. Train leaves Union Station Memphis 7:30 P. M. daily and runs solid to Washington reaching there 12:30 second midnight. Sleeper placed on upper level of Terminal Station and passengers are undisturbed until morning. Tickets via this route should read: Southern, Memphis to Bristol, Norfolk and Western, Bristol to Lynchburg, and Southern to Washington.

2nd. Via Chattanooga, Morristown, Asheville and Salisbury. Leave Memphis also 7:30 P. M., arrive Asheville 1:10 P. M. (CT) 2:10 P. M. (ET) next day, leave Asheville 2:50 P. M. (CT) 3:50 P. M. (ET) and arrive Washington 7:30 P. M. Tickets via this route should read: Southern all the way, Memphis to Washington.

While the Memphis Special carries a through sleeper every day between Memphis and Washington without change, yet on November 10th an extra sleeping car will be operated for special occupancy by physicians and surgeons going to this convention.

If you contemplate going to the Convention will you please advise me and what space you desire and on what date and whether via Bristol, or via Asheville.

C. A. De Saussure,
Division Passenger Agent,
Southern Railway System,
Memphis, Tenn.

NEW AND NON-OFFICIAL REMEDIES

Asphenamine-Squibb, 1 Gm. Tubes.—Each contains 1 gm. arsphenamine-Squibb (see New and Non-official Remedies, 1923, p. 49). E. R. Squibb & Sons, New York.

Ampules Pituitary Solution—Squibb, 0.5 Cc.—Each contains 0.5 Cc. pituitary solution—Squibb (formerly marketed as solution of hypophysis—Squibb, see New and Nonofficial Remedies, 1923, p. 219). E. R. Squibb & Sons, New York.

Ampules Pituitary Solution—Squibb, 1 Cc.—Each contains 1 Cc. pituitary solution—Squibb (formerly marketed as solution of hypophysis—Squibb, see New and Nonofficial Remedies, 1923, p. 219). E. R. Squibb & Sons, New York.

Pollen Protein Allergens—Squibb.—In addition to the Pollen Protein Allergens-Squibb listed in New and Nonofficial Remedies, 1923, p. 241, the following have been accepted: Apple Pollen Allergens-Squibb; Black Walnut Pollen Allergen-Squibb; Cherry Pollen Allergen-Squibb; Dandelion Pollen Allergen-Squibb. E. R. Squibb & Sons, New York.

Group Allergens Diagnostic-Squibb.—In addition to the Group Allergens Diagnostic-Squibb listed in The Journal, August 4, 1923, p. 393, the following has been accepted: Group Allergens-Squibb, Type XXIII (Ash, Cherry, Maple, Oak, Poplar, Willow). E. R. Squibb & Sons, New York (Jour. A. M. A., Sept. 1, 1923, p. 749).

Protein Extracts Diagnostic-P. D. & Co.—In addition to the Protein Extracts Diagnostic-P. D. & Co. listed in The Journal, August 11, 1923, p. 477, the following have been accepted: Goldenrod Pollen Protein Extract Diagnostic—P. D. & Co., and Tobacco Protein Extract Diagnostic—P. D. & Co. Parke, Davis & Co., Detroit.

Pollen Allergen Solutions-Squibb.—Solutions containing the sodium chloride soluble proteins from isolated pollens of various species of plants. For a discussion of the actions, uses and dosage, see Pollen and Epidermal Extract Preparations and Biologically Reactive Food Proteins, new and Nonofficial Remedies, 1923, p. 234. Pollen Allergen solutions-Squibb are intended for the prophylaxis and treatment of hay fever. They are marketed in the following forms: Set A: ten vials containing ten consecutive doses (Nos. 1 to 10); Set B: five vials containing five consecutive doses (Nos. 1 to 5); Set C: five vials containing five consecutive doses (Nos. 6 to 10); Set D: five vials of dose No. 10; Set E: five vials of dose No. 11. The following products have been accepted: Timothy Pollen Allergen Solution-Squibb and Ragweed Pollen Allergen Solution-Squibb. E. R. Squibb & Sons, New York.

Malt Extract (Unmedicated)—P. D. & Co.—A preparation essentially similar to extract of malt, U. S. P. (see New and Nonofficial Remedies, 1923, p. 177), but containing 10 per cent of glycerin. 1 Gm. of the extract converts 5 to 7 Gm. of starch to maltose and dextrin in thirty minutes at 40 C. Parke, Davis & Co., Detroit.

Malt Extract with Cod Liver Oil—P. D. & Co.—Each 100 Cc. contains Norwegian cod liver oil, 25 Cc. and malt extract (unmedicated)—P. D. & Co., 75 Cc. Park, Davis & Co., Detroit.

Argyn Tablets, 6 grains.—Each tablet contains 6 grains argyn (see New and Nonofficial Remedies, 1923, p. 330). Abbott Laboratories, Chicago.

PROPAGANDA FOR REFORM

Administration of Insulin.—The present methods of administering insulin parenterally are far from satisfactory. Consequently, the earliest investigators of insulin and other pancreatic preparations attempted to secure physiologic effects by oral administration. There is evidence that slight effects may be obtained when insulin or other pancreatic preparations are introduced into the organism by way of the mouth under certain conditions. On the whole, however, the oral administration of insulin has proven quite inefficient. Rectal administration and nasal insufflation have been tried without success. A recent study showed that pancreatic extracts taken in capsule form by the stomach was not effective in decreasing blood sugar or urinary sugar. It is desirable to give wide publicity to the current limitations of a most promising therapy, since unscrupulous venders are already attempting to distribute just-as-good pancreatic or antidiabetic preparations that are recom-

mended for oral use. (Jour. A. M. A., Sept. 1, 1923, p. 752).

El Zair.—This is quackery's latest offer of an elixir of life. The nostrum is brought to the attention of the public by El Zair, Inc., New York. The firm claims that the elixir of youth has at last been found. Much is made of the endorsement which the late W. T. Stead is stated to have given the nostrum. El Zair is to be dissolved in water and applied by sponging the body with it daily. The A. M. A. Chemical Laboratory analyzed El Zair and reported that essentially it may be considered to consist of one part of glacial acetic acid and three parts of magnesium sulphate (Epsom salt) perfumed with oil of bergamot. The contents of a bottle of El Zair are to be dissolved in a pint of water and, therefore, an essentially similar solution can be made by dissolving 2 1-2 ounces of Epsom salt in a pint of distilled vinegar. (Jour. A. M. A., Sept. 1, 1923, p. 768).

Lactic Acid-Producing Organisms and Preparations.—The Council on Pharmacy and Chemistry reports on the present status of sour milk therapy. During recent years reports have been published which indicate that the growth in the intestine of the normally presenet Bacillus acidophilus may be increased so as to make this the predominating organism, by the administration of lactose, by milk fermented with Bacillus acidophilus, or by the administration of viable cultures of Bacillus acidophilus in conjunction with lactose. Growing out of the claims of favorable therapeutic action, the use of so-called Bacillus acidophilus milk and other products prepared with B. acidophilus has become quite widespread. While no one subscribes today to the original theories of Metchnikoff, there are many who believe that the regulation of the bacterial flora is of importance. There is evidence that the administration of sour milk is at times beneficial, particularly in pediatrics. A wide clinical observation indicates that for certain types of gastric and intestinal disturbances, fermented milk accomplishes more than unfermented milk. (Jour. A. M. A., Sept. 8, 1923, p. 831).

Accidents with Local Anesthetics.—The chairman of the committee for the study of toxic effects of local anesthetics, appointed by the Therapeutic Research Committee of the Council on Pharmacy and Chemistry, publishes a preliminary report. The committee has received reports of forty-two deaths following the use of local anesthetics occurring within the last few years. These accidents have not been reported on by former committees of the Association. The deaths reported are:

Anesthetic	Number
Stovain	1
Alypin	1
Procain	3
Apothesin	4
Butyn	4
Butyn and Cocain	1
Procain and cocain	10
Cocain	18
Total	42

Under the headings Procain, and Procain and Cocain, novocain is included: one is reported as procain and the other twelve as novocain. As the five deaths following the use of butyn are the firse reported, the committee is very desirous of receiving full details of other fatalities for comparison of relative toxicity. These reports should be sent to the chairman of the committee, Emil Mayer, M. D., 40 East Forty-First Street, New York City. (Jour. A. M. A., Sept. 15, 1923, p. 947).

Some More Miscellaneous Nostrums.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Cowan's Rheumatism Herb (Rheumatism Herb Co.), consisting of dried and moldy leaves of a species of eucalyptus. Jad Salts (Wyeth Chemical Co., Detroit—not John Wyeth Bros., Philadelphia), consisting essentially of citric and tartaric acids, salt, baking soda, sodium phosphate and very small amounts of hexamethylenamin, lithium carbonate and potassium bicarbonate. Crane's Quinin and Tar Compound (Crane Medicine Co.), consisting essentially of quinin, sodium salicylate, ammonium chlorid, Epsom salt, oil of anise, tar, menthol, table salt, calcium phosphate, sugar, alcohol and water. Crane's Liver Pills (Crane Medicine Co.), consisting essentially of aloes and magnesium carbonate. Crane's Kidney Pills (Crane Medicine Co.), containing methylene blue, hexamethylenamin, plant extractive and iron sulphate. Tekol (Colonial Tablet Co.), containing ground celery seed and cocoa with about a half grain of caffein in each tablet. Veronica Water (Veronica Medicinal Springs Water Co.), containing magnesium sulphate (Epsom salt), sodium nitrate, sodium chlorid (common salt), calcium bicarbonate, calcium sulphate and magnesium chlorid. (Jour. A. M. A., Sept. 15, 1923, p. 946).

So-called "Improved" Ethers.—In 1919, Cotton declared that ethyl ether specially purified was not a good anesthetic, and that real anesthesia could not be obtained unless ether contained some potent synergist. He proposed the use of Cotton Process ether which was stated to be ether containing ethylene, carbon dioxid and ethyl alcohol. The manufacturer submitted Cotton Process Ether to the Council on Pharmacy and Chemistry, but so far, confirmation of Cotton's claims is lacking. Wallis and Hewer of England have also recommended a new general anesthetic with the claim that pure ether possesses practically no anesthetic properties, and that their product contains a mixture, in unspecified amounts, of ketones (identified only in vague terms) which have been treated previously with carbon dioxid and ethylene. This product has been placed on the market as "Ethanesal." It has received some endorsement, especially from Dr. H. E. G. Boyle of London, who made it the subject of addresses on anesthesia in this country. In contradiction of the claims made for Cotton Process Ether and "Ethanesal," Bourne and Stehle showed that ether prepared in a way to exclude impurities possesses the usual anesthetic properties. A painstaking investigation recently reported by Dale, Hadfield and King confirms the generally accepted belief that the anesthetic action of ether is due to the ether itself. They also report their examination of "Ethanesal." They found "Ethanesal" to contain 95.5 per cent. ether, 4 per cent. normal butyl alcohol, and 0.5 per cent. of a mixture of ethyl alcohol and an aldehyd and possibly traces of other substances. The investigation shows that there is no evidence to warrant attributing the anesthetic action of "Ethanesal" to any other constituent than the ether. On the contrary, the work shows that the anesthetic action of ether is improved by purification. (Jour. A. M. A., Sept. 22, 1923, p. 1040).

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Reprints of original articles will be supplied at actual cost, provided request for them is attached to manuscript or made in sufficient time before publication.

Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Commercial National Bank Building, Muskogee, Oklahoma.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

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EDITORIAL

"PROFESSIONAL REPUTATION HARD TO BUILD UP, IS EASILY DESTROYED."

"Papers were filed today in a suit for $25,000.00 brought against a reputable dentist in which it is alleged that a patient died due to an overdose of cocaine." In accordance with its policy, the names are not printed in **The Daily News.** "It requires a long time to build up and cherish a fine professional reputation—but a moment to destroy it."

This is not all that the **Passaic Daily News** has to say about the too loose habit of most newspapers rushing to print with sensational allegations against reputable men. The newspapers and their editors seem to have a strange system of reasoning this matter out. They hold it to be their inherent right to reproduce any matter filed in any court, regardless of the previous record for fine actions of the man assaulted. They hold that if the matter is filed in any court that it is a matter of public interest, therefore they have a right to reproduce it. Of course they have no such right, for more often than not, these very allegations are filed by the most vicious, irresponsible attorneys, men of the lowest grade of character, shielded by the force of the law which permits them to reduce to writing the most impossible charges. In the end these charges, against both physician and druggist, are nearly never sustained. They often contain the extreme of libelous matter, but the moment it is filed as a petition in court it loses its character of libel, by some strange twist of the law, is allowed to stand until the day the court declares it to be untrue, all ending in no recourse whatever for the person who has really been aggrieved.

BE OFF WITH THE OLD BEFORE ON WITH THE NEW

One of the perplexing things of medicine is the habit that will not down, of some of our practitioners repeatedly prescribing large masses of messes, simply upon the recommendation of some detail man, representing a house with something to sell, often of no value to the patient whatever. It is agreed that the habit is not as bad as it once was, that constant propaganda against it is having, and will continue to have results showing a downward trend, therefore increased protection to the man who must eventually, pay, the helpless patient, who has no recourse but "sign on the dotted line," the line being in his check-book. Physicians should in every way try to protect the interests of their patients, financial as well as physical. They should not forget that every time they whip out a fountain pen, write a prescription, order it delivered to some person, that a very handsome little bill, out of all proportion to the good effected, as a general rule, will wind up the proceeding. A glance at some of the bills paid for very simple, inexpensive medicines, causes a feeling of protest and outrage. The doctor has it in his power to alleviate these conditions to a great extent.

THE SKY SEEMS TO BE THE LIMIT

Speaking of charges for drugs and accessories calls our attention to another matter concerning the sick and helpless, which lays the small graft of the druggist entirely in the shade. Nothing can compare with the enormous increase in charges made by hospitals and institutions caring for the sick, when the record of a few short years is reviewed. Reviewing a paper by Dr. E. Mac D. Stanton of Schenectady, N. Y., the **Illinois Medical Journal** quotes Dr. Stanton as giving the following figures, in part, from two New York Hospitals, outside the city of New York. Cohoes Hospital in 1913 charged $3.00 for the operating room, in 1922 the same charge had jumped to $15.00, while a special nurse's fee was $70.00 per week, which did not include her board bill, amounting to an extra $14.00 per week. Ellis Hospital, Schenectady, in 1912, charged for operating room $5.00, in 1922 the charge had mounted to $15.00, special nurse in 1912, $25.00, in 1922, $70.00. The gist of the matter being that it cost the unfortunate, and regardless of his social or financial standing, $35.00 for a fair private room, $70.00 for special nurse, $15.00 for operating room, $14.00 for board, a total of $134.00 for the first week's service, after which, if things went well it might be that the weekly charge would be reduced to the small and insignificant sum of $119.00 per week. Certainly this is an amount of money not to be regarded with equinimity by most people, in fact most of our people cannot afford such luxuries at all, and a trip to the hospital spells disaster for many people, not only physical, but financial disaster as well. Here, too, the practitioner should intervene in every way possible. He should realize that every day his patient remains in the hospital, remains under a ten dollar a day nurse, that the conditions may be intolerable and impossible for his patient. Even if it does mean some little extra inconvenience in preparing dressings and similar things at home, that had better be done by a little sacrifice on the physician's part rather than have his charge suffer such severe financial onslaughts as actually exist today in our midst. The patient is too often too proud and sensitive to speak of the matter himself, so he silently suffers. It is up to the doctor in this case to relieve the situation as much as possible.

REED—FROM SURGEON TO PUBLICIST

Dr. Charles A. L. Reed, in a personal communication announces his vaulting from the position of one of Cincinnati's busiest and most competent surgeons to that of publicist. He, like too few of our profession, lays down the scalpel for the pen in an attempt to carry health matters to the people. He asks for a hint as to how best to reach the man on the street, how best may he influence the "rising generation." Well, he lays down a hard task for anyone to fulfill. It is especially hard to get an answer out of one who has seen the work of years, whatever it amounted to, if anything, swept aside by foolish legislation or lack of any legislation of any sort, who knows the attitude of many of his profession to be that they feel all such efforts to be futile and in the end productive of no good. He asks how to reach "the man in the streets." To that we would say do not attempt it. In the first place he is old and hard-boiled, has reached that stage in life where he admits he already knows all about everything anyway. Does he not read that highly informative sheet, **Hearst's International?** A sheet read by hundreds of thousands, who do not know they are often as not reading skillfully prepared propaganda instead of what they think they are reading, a news article based upon good faith and intent. To that part of Dr. Reed's effort we would advise "do nothing." It is not worth while. Now with the youth of the country, the matter is of vast importance. Advice to them should be forthcoming, but it should be sound. Argumentative and speculative matters should have no place in the message to them, but they should as we have said in THE JOURNAL for years, be taught the fundamentals of hygiene and sanitary living. The message to them falls upon fertile, receptive soil, and years after it is given them it will be found productive of a finer citizenship, the American people will hardly recognize in tomorrow, a picture of the man of today. One vicious, ignorant careless person will not be allowed to imperil the health of all the people about him. The walking, automobiling purveyor of disease will at least be a thing rarely to be seen. That phase of the work should be undertaken. The only properly fitted person to pass the message along is the well informed physician. Even in that respect the work has its dan-

gerous aspects, for the passing of misinformation or poorly collected information is not an unknown episode in the experiences of the observing physician. We still adhere to the idea that the high-school is the medium through which the coming generation may be best approached. Here, we again meet what seems to be insurmountable difficulty. The inefficient hand of cheap politics intervenes on every side. This alone is sufficient to dishearten many men who otherwise would be willing to sacrifice their time, imperil their only source of income, for that is exactly what it does. We have seen many good men in Oklahoma compelled to disgustedly throw up their hands and quit, what to them had been a work of inspiration and pleasure, certainly not one of financial profit. Perhaps no more glaring example of this is to be found than in the case of Dr. W. L. Kendall, Enid, Superintendent of the school for feebleminded children. The good record of years was forgotten in the face of baseless charges from impossible people. The fact that this situation exists should not be allowed, however, to prevent giving aid to future generations. Our profession has a definite position to fill, and even if it is unpleasant, our responsibility should not be shirked. By all means help the youth to help himself.

Editorial Notes—Personal and General

DR. O. H. PARKER, Custer, visited in Texas recently.

DR. GEORGE STRICKLAND, Claremore, is confined to his bed.

DR. D. M. LAWSON, Nowata, attended the clinics at Kansas City.

DR. G. A. WALL, Tulsa, is attending the College of Surgeons at Chicago.

DR. A. L. McINNES, Enid, is at Chicago doing special work in obstetrics.

DR. R. D. LONG, Oklahoma City, has returned from a visit to Amarillo, Texas.

DR. BLAIR POINTS, Luther, was recently called to Chicago, on a professional trip.

DR. and MRS. A. E. CARDER, Coweta, made a short visit to Arkansas last month.

DR. SHADE NEELY, Muskogee, spent a week attending the clinics at Kansas City.

DR. I. V. HARDY, Medford, returned from a three weeks' attendance at the Mayo Clinics.

DR. J. WALTER BEYER, Tulsa, has returned from a six weeks' hunting and fishing trip.

DR. J. R. SWANK, Enid, has returned from a month's work at the Mayo Clinic at Rochester.

DR. K. D. GOSSOM, Custer, returned recently from several weeks' vacation spent in the West.

DR. M. M. McCORD, Helena, has been appointed head of the Institute for Feeble Minded at Enid.

DR. S. J. BRADFIELD, Bartlesville, attended the American Legion convention at Frisco, last month.

DR. B. W. BAKER, Cordell, was taken to Clinton recently for abscess of the throat, and is improving.

DR. A. E. HALE, and family, Alva, are visiting at Kansas City, Mo., where the doctor attended the clinics.

DR. J. O. GLENN, Stroud, is the proud owner of part of a 1500 barrel oil well newly discovered near Bristow.

DR. W. J. RISEN, Hooker, received three fractured ribs recently in attempting to get off a moving train there.

DR. JOSEPH A. PATTON, formerly Stilwell, has moved to Claremore and opened an office at "Radiumtown."

DR. and MRS. J. R. HINSHAW, Butler, announce the arrival of J. Raymond on October 8th, weight 8 pounds.

DR. and MRS. A. HUTCHINSON, Bixby, motored to Kansas City and return, where the doctor attended the clinics.

DR. and MRS. F. L. WORMINGTON, Miami, spent a few weeks at Kansas City, the doctor attending the clinics.

DR. and MRS. B. W. RALSTON, Okmulgee, returned from a three weeks' motor trip in the western part of the state.

DR. and MRS. CYRIL E. CLYMER, Oklahoma City, are visiting in Illinois with friends and will spend a week at Chicago.

DR. E. E. NORVELL, Wynnewood, attended the meeting of local surgeons of the Santa Fe Hospital Association at Temple, Texas.

DR. J. A. JONES, Ponca City, returned from a hunting trip in the Rockies, bringing along a bear hide to prove his marksmanship.

DR. MORRIS LHEVINE, Tulsa, is again in his office after two months spent in the northern and eastern Radiographic laboratories.

DR. R. F. CANNON, Miami, returned recently from a three months' trip through Europe, having visited London and Paris and other points.

KIOWA COUNTY SOCIETY had an interesting meeting September 14 at Hobart, the principal activity being the performance of an autopsy.

DR. J. R. CALLAWAY, Pauls Valley, returned from a visit to his wife at Kansas City, where she has been for some time for special treatment.

DR. W. M. CAMPBELL, Vinita, returned recently from a month's vacation in the West, leaving Mrs. Campbell in Utah, where she is visiting relatives.

DR. G. A. WATERS, Lenapah, was appointed health officer of Pawnee County, taking the place of Dr. T. F. Gastineau who has moved to Vinita.

DR. CLARA F. PALMER, formerly of McAlester, has given up her practice there to enroll in the freshman class at Norman in the school of law.

DR. MARVIN E. STOUT, Oklahoma City, has severed his connection with the Oklahoma City Clinic and opened offices at 304 Patterson Bldg.

DR. E. A. AISENSTADT, Picher, has been appointed chairman of the Hospitalization Committee of the Oklahoma Department of the American Legion.

DR. JAMES C. BRASWELL, Tulsa, is attending the annual meeting of the American Academy of Ophthalmology and Oto-Laryngology at Washington, D. C.

DR. and MRS. G. W. GOSS, Pawhuska, returned recently from a trip to Kansas City where the doctor attended the clinics, and from a visit to Smithvilee, Mo.

DR. CHARLES EDGAR WHITE, Pawhuska, was married to Miss Carolyn Hearn Hurt, daughter of Dr. and Mrs. Henry P. Hurt, of Memphis, Tennessee, on October 8th, 1923.

DR. WINNIE M. SANGER, Oklahoma City, has been appointed in charge of the health supervision of women students of the University at Norman, and will lecture on health problems.

DRS. I. D. WALKER, DR. and MRS. A. S. RISSER, DR. and MRS. J. C. HAWKINS, and DR. A. C. SYFERT, Blackwell, have returned from Kansas City attending the clinics there.

DR. NEWTON RECTOR, Hennessey, attended the national encampment of the G. A. R. at Milwaukee, stopping off at Streator, Illinois, to take part in the regimental reunion of his old regiment.

WOODS COUNTY SOCIETY met at Waynoka last month in semi-annual convention at the city hall, with the president, Dr. James Bowling, Alva, presiding, and Dr. O. E. Templin, Alva, as secretary.

DR. H. D. MURDOCK, Tulsa, and family, have returned from a motor trip to the Pacific Coast, via the southern route, thence up the Coast to Washington and back home via Yellowstone Park and Colorado.

DR. WANN LANGSTON, Oklahoma City, was married October 6th, to Miss Clara Louise Jones, at Onteora, New York. The bridal couple will be at home after November 15th at 1220 West 12th Street, Oklahoma City.

McINTOSH COUNTY SOCIETY met at Checotah October 9th, and had one of the usual good programs with a paper, "Vomiting in Infancy and Early Childhood" by Dr. C. V. Rice, Muskogee, as the opener, followed by a clinic and report of cases.

DR. J. H. MORGAN, Tulsa, and family, left for Texas in June in quest of a place where Dr. Morgan could be freer from the increasing asthmatic attacks he has been experiencing. Word from San Antonio that the Doctor is much better will be very grateful to his many friends in the State.

CUSTER and WASHITA COUNTY SOCIETIES held a joint meeting at Clinton last month. The program consisted of an address by the state commissioner of health, Dr. A. E. Davenport, and papers by Dr. A. J. Jeter, Clinton; Dr. A. S. Neal, Cordell, and Dr. E. E. Darnell, Clinton. Discussions by Dr. K. D. Gossom, Custer and J. J. Williams, Weatherford.

DR. WARREN T. MAYFIELD, Norman, chairman of the clinic committee of the Norman Kiwanis club medical clinic for underprivileged children, opened the clinic at the Red Cross rooms there last month. It is fully equipped for examinations and minor operations, and will care for patients on Tuesdays and Fridays, with a staff of Norman doctors in charge.

DR. EARL MILLER has been appointed Director of the Department of Experimental Medicine of Parke, Davis & Company, Detroit, to fill the vacancy following the death of Dr. Ezra Read Larned, who was the originator and organizer of this department and occupied the position as head of the department until his death. Dr. Miller was assistant to Dr. Larned for twelve years and has a wide acquaintance among medical men interested in clinical research work.

SAPULPA MEDICAL SOCIETY held monthly meeting last month at the nurses home and found a large attendance to discuss the newly organized training school for nurses at the city hospital. Following the meeting, refreshments were served. Those present were: Drs. G. C. Croston, H. S. Garland, P. K. Lewis, H. R. Haas, Ellis Jones, Alva Jones, J. B. Lampton, W. P. Longmire, J. M. Mattenlee, J. S. McAllister, W. B. Robinson and L. L. Smith.

MUSKOGEE COUNTY SOCIETY met October 8th with a large attendance for the initial fall meeting, having as visitors several of the staff of the U. S. Soldiers Memorial Hospital. An interesting paper on "Insulin" by Dr. Charles W. Heitzman was discussed freely. Dr. S. G. Hamm, Haskell, was elected to membership. A symposium on Lobar Pneumonia will be presented at the next meeting October 22.

MORNINGSIDE HOSPITAL, Tulsa, announces an addition that will increase the Institution by 30 beds. It is the plan to extend the present building forward to the building line. The addition will be three stories and is greatly needed. Morningside Hospital has become organized dur-

ing the summer months. Their advertisement containing the list of the staff appears in the advertising pages. Staff meetings are being held regularly and the Hospital is going forward under the reorganized plan.

UNIVERSITY OF OKLAHOMA—Enrollment in the University school of medicine has been closed with the acceptance of 53 freshmen and 46 sophomores, it was announced by Dr. L. A. Turley, assistant dean of the school. Lack of facilities and space was given as the reason for limiting the number of students. Enrollments this year are greater than ever, Dean Turley says, adding that when the new building for the school is completed, there will be ample room for all students who desire to enter.

DR. J. W. DAY, (D.D.S.), Tulsa, announced on September 2nd that, after numerous delays, work will shortly commence on the Medical Arts Building at the corner of 6th and Boulder Avenues. Foundation will be for a 12 story building but present plans are for one of 8 floors. The first floor will be used by drug store, surgical supply house, optical house, six floors for offices. Every convenience will be provided; many not found in commercial buildings. There will be shower baths in basement, rest room for female attendants of offices. Compressed air outlet in each room, etc. The top floor will have an emergency hospital. The building will contain assembly room for the Medical and Dental Societies and to house a library.

TULSA COUNTY MEDICAL SOCIETY held its first meeting after summer vacation on Monday, September 24th, with a large attendance. Dr. Jeff Billington was elected a member of the Society and Drs. T. R. Roberts, E. A. Hawk and R. C. Farris were received by transfer from Rogers, Beaver and Muskogee counties, respectively.

Dr. D. L. Smith read his paper on Bi-Chloride Poisoning. The paper was very interesting, well received and freely discussed.

Invitations to attend the meetings of the Mississippi Valley Medical Society and the Kansas City Clinical week were read.

The Secretary was instructed to write several prominent physicians who have promised members that they would appear before the Society and asked them to read their papers in the near future.

A CORRECTION

The JOURNAL last month printed the obituary of Dr. Charles B. Barker, Guthrie, taking the information from the usual source, a press clipping. Since then, to our pleasant surprise, we have learned that the information of Dr. Barker's demise, like that of Mark Twain's, was grossly exaggerated and we are glad to print below Dr. Barker's letter on the subject:

C. A. Thompson, M.D., Editor,
Muskogee, Oklahoma.

Dear Dr: In your last issue of the State Journal, my obituary appeared. As I'm still alive, I hope your Journal is thirty (30) years ahead of its time. It is true, I spent eight (8) weeks in bed due to typhoid fever, complicated by a carbuncle on the back of my neck, endocarditis and phlebitis in both legs; otherwise I'm all right.

I would very much appreciate it if you would correct this in your next issue so the physicians around Guthrie may know I'm still practicing.

Thanking you,
I am Fraternally,
C. B. Barker, M.D.

DOCTOR CHARLES C. YEISER

Bryan County's oldest practicing physician, in point of years of service, Dr. Charles C. Yeiser, passed away at his home in Colbert, Oklahoma, September 17, 1923, following a protracted illness, death being due to Bright's disease. Dr. Yeiser has continually been engaged in the practice of his profession for more than 36 years, having come to the country before it had begun to develop. He was born at Macomb, Illinois, on May 26, 1854, and graduated from the Medical College of Evansville (Indiana) in 1884, and leaves one daughter, Miss Craig, a teacher in the McAlester public schools.

Dr. Yeiser was a fellow of the American Medical Association, and a member of his county society and state association. He leaves behind a host of friends made during the long years of service to his fellowman. Funeral services and interment was made at Colbert.

DOCTOR LOUIS E. McCURRY

The death on September 12th, 1923, of Dr. Louis E. McCurry, at Tahlequah, Oklahoma, took an honored citizen and good physician. Dr. McCurry was born on August 12, 1860, in Tennessee, was licensed in Arkansas in 1890, and had been active in the practice of his profession for more than 21 years in and about Tahlequah. His health had been failing fast since the fatal illness of his daughter six months ago, and his death was not unexpected. Dr. McCurry was married in 1890 to Miss John Etta Moody, the couple having one daughter, Miss Alice, mentioned above, and is survived by his wife and four brothers. He was of a deeply religious nature, and left behind him to mourn his loss, beside his family, are hundreds of friends made during the long years of his practice. Dr. McCurry was for more than thirty years a member of the Methodist Church, and was a member of his state association.

Funeral services were conducted at the Methodist Church at Tahlequah, and the interment in the Tahlequah cemetery, under the auspices of the Masonic order, of which Dr. McCurry was an old member.

GENERAL SURGERY

Edited by G. A. Wall, M. D., F. A. C. S.
303 Palace Bldg., Tulsa

OLD MASTERS

PHILIP SYNG PHYSIC (1768-1837), of Philadelphia, a pupil of John Hunter's, and sometimes called the Father of American Surgery, was an Edinburgh graduate of 1792, surgeon to the Pennsylvania Hospital in 1794, and professor of surgery in the University of Pennsylvania (1805-18). He wrote nothing of consequence. He is now remembered principally by certain procedures of importance in their day, such as the introduction of absorbable kid and buckskin ligatures, the use of the seton in ununited fracture, an operation for artificial anus (1826), the advocation of rest in hip joint disease (1830), and the invention of the tonsillotome (1828).

His modification of Desault's splint for fracture of the femur is still in use. He seems to have been the first to describe divertula of the rectum (1836), and he was the first American to wash out the stomach with a syringe and tube in a case of poisoning (1802).

TUBERCULOUS ADENITIS: ITS SIGNIFICANCE AND SURGICAL TREATMENT.—Beck, Emil G. Surg. Clinics of N. A., Aug. 1923; P. 1144.

The author states that in reviewing the development and changes in the treatment of tuberculous adenitis of the neck, one is impressed by the fact that 20 years ago there were many operations for tuberculous glands, while now we see such procedures only occasionally. Recurrence was frequent and the scars which remained were common and unsightly. He thinks it possible that the removal of the tonsils in early childhood is one of the preventive measures against enlarged glands.

The chronic and gradual enlargement of the glands is not a disease per se, but he considers it a secondary infection, the eprimary focus of which is usually in the mucous membrane of the upper air passages, tonsils, teeth and sometimes in the accessory nasal sinuses: The enlargement is not always of tubercular origin, and when the affection is acute the enlargement is only temporary and subsides as soon as the primary infection has subsided. Some children around the ages of three to six years, sometimes several members of the same family have a slight enlargement of the glands back of the sternocleido mastoid which may or may not be tuberculous and gradually disappear without suppuration. This result is brought about by one factor, called immunity. He states that we find in every individual over 25 years of age some evidence of gland involvement, such as shadows in the lung especially in the hilus, and deposits of calcium salts which give a definite shadow; this does not mean active disease but that the patient has recovered from a disease which has previously existed. He proved this on a series of healthy nurses, the streoroentgenogram of their chests showed not a single case free from glands in the hilus of the lungs. He advises against operation when the picture shows the glands to have undergone calcification, if the patient does not object to the deformity and the health is unimpaired.

The author is much impressed with the theory of immunity against disease and divides it into three classes, viz: natural, acquired and artificial. Natural immunity varies in different individuals and in different stages of their lives. If there were no immunity the child at birth would succumb from the first inhalation of air, because of the various types of pathological micro-organisms present. He says that tuberculosis has a great tendency to immunize the body, since if this was not true, all once affected with tuberculosis would die.

Tuberculous glands are not confined to the neck but are more frequent in the hilus of the lung than elsewhere. Abscesses called "colds" are broken down tuberculous glands in which the pus is sterile. Enlarged glands of the neck are by no means all tuberculous, since we have enlarged glands following tonsillitis, measles and scarlet fever. When the glands develop slowly and keep on increasing or remain stationary we should suspect the tuberculous type, although not entirely true, for we should eliminate multiple sarcoma, Hodgkin's disease and infections due to nose, throat or teeth. Multiple sarcoma is not limited to the neck but is found in all parts of the body, while Hodgkin's disease in its incipiency is often mistaken for tuberculosis, but in this case the enlarged glands are found in the lungs, spleen and under the arms in the axilla. The tumors are much harder as a rule, not separated but adherent to one another and feel like a fibroid tumor, and the diphtheroid bacillus may be cultured from the tissue.

Regarding the treatment he states that surgeons do not decide as readily upon their removal as they did 20 years ago, and he has done only three resections in the past ten years in a large series of cases. The course of procedure depends largely on the stage and extent of the disease. Enlarged glands of recent occurrence and where the infection is acute should be let alone for the time being, since they will usually recede, but if the enlargement persists, and the glands keep on growing, hunt for the focus of infection. Have the teeth examined by a competent dentist with the radiograph; the nose and throat should be examined and any tonsillar disease should be treated.

Tonsillectomy is especially indicated when they are diseased and he has seen the glands disappear after their removal in many instances. This should all be done before treating the glands themselves, then if they do not decrease resort to deep x-ray or radium therapy.

If the glands undergo caseation or suppuration, then it is best to make a very small incision under local anaesthesia, eliminate as much as possible of the cheesy mass and inject with a 10 per cent bismuth paste: If the gland does not reduce in size it may be necessary to resort to resection, in which case the wound, if not too large, should not be sutured, but the cavity should be left open and packed with gauze for 24 hours, then remove the gauze approximate the edges by adhesive plaster. This procedure leaves less prominent scar and less tendency to keloid formation.

In most cases where sinuses originate in bony structure, it is necessary to remove the diseased bone before we may expect any results from the bismuth treatment.

CONSERVATISM IN ACUTE PELVIC INFECTIONS.—Polak, John O. Surg. Gyn. and Obst., Sept. 1923, P. 414.

The author states that a better understanding of the physiological pathology in pelvic lesions, and more minute study of the habits of bacteria and tissue reaction excited by the entrance of

pathogenic bacteria, have done much to swing the pendulum toward conservatism in pelvic infections. The bacteria reach the pelvic tissues through an abrasion or wound by way of the lymphatics, through the placental site, or along the mucous membrane of the cervix uterus and tubes.

The common type in puerperal infection are the streptococcus, the staphylococcus and occasionally the pneumococcus and gas bacillus of Welch. In nonpuerperal infection the gonococcus alone or the streptococcus alone, or both combined, are the exciters of the reaction. The whole process of normal labor is so arranged that it is combatative of infection. There is a natural dividing line of the utero-vaginal tract at the internal os into an infected zone below and a sterile zone above. The lochia is bacteriacidal in the first few hours after delivery and the liquor amnii cleanses the passage, and other factors are conducive to the prevention of infection, hence unless bacteria are carried into the sterile zone and innoculate the wound, nature is competent to offer the necessary resistance.

He contends that infection occurs by introduction of bacteria through traumatism of the cervix; through innoculation of the uterine wound itself and through the placental site. Wounds of the cervix are the most common points of entrance in all hurried or in prolonged dry labors and if the infection is virulent, the patient is given no chance to establish her immunity. He thinks that in acute puerperal infection surgery should be confined to incision and drainage of the cul-de-sac or parametrial abscesses, or drainage in a spreading infection. In puerperal endometritis with a profuse fetid lochia, an open cervix, uterine pain and relaxed soft tender uterus, these ends may be obtained by the Ill tube and iodoform gauze drain with alcohol instillations.

None of the medical measures, such as curettage, hysterectomy or ligation of the pelvic veins are justified in the light of our present knowledge, he asserts. In acute gonorrhoeal infection active surgery has no place. The Fallopian tubes are the final resting place of the Neisser bacillus, where it remains latent for indefinite periods and dies in from six to eight weeks after the fimbriated end becomes occluded, provided rest and conservative measures prevail.

BRAIN ABSCESS.—Harry Hyland, M.D., C.M. Arch. Surg., Sept. 1923. P. 297.

Abscess of the brain may be single or multiple, and any pus producing organism may be the exciting cause. The condition is always secondary to suppuration elsewhere, following most frequently infections of the ear or sinuses, still it may follow infection elsewhere in the body, and may follow traumatism of the skull in perforating fractures.

It is usually found in adults and is supposedly rare in children. Abscess of the frontal lobe is relatively rare since Eagleton, in an exhaustive review of published cases, found only about 150 frontal lobe abscesses reported, while more than 900 cases of abscess of the middle cerebral fossa were found by him in the literature. In the author's analysis of 113 cases, he found that about half of them were not recognized until autopsy. The mortality is very high (75 per cent) and is much higher among patients operated on late. He lays great stress on the need for an earlier diagnosis, so that the condition may be attacked during the latent and more hopeful stage. He concludes that the pathology of the condition is a localized encephalitis, the infection reaching the cranial contents by direct extension from an adjacent abscess, or by septic emboli from a distant process. At the outset the process may be called an "acute softening of the brain" and its progress may be very rapid, ending in death. At times the abscess may become encapsulated, producing a quiescent stage, which may last many months or years, but eventually one of two things occurs: The abscess ruptures or a secondary encephalitic process starts, progressing to a rapidly fatal issue. Rupture of a brain abscess may occur when the condition was not suspected, and because the frontal lobe is a so-called "silent area" it is particularly susceptible to this condition.

The symptoms are general and focal. The general are those of an infection plus increased intracranial pressure: The chief complaint is headache and there may be vomiting and convulsions or stupor. The temperature may be normal or subnormal, and leucocytosis of a low grade is common but often lacking in the latent stage. Pressure symptoms are usually lacking or inconspicuous, since the process destroys rather than displaces the brain tissue.

In the early and acute stage the diagnosis must rest on the evidence of intracranial involvement from a neighborhood infection, especially of the middle ear or head sinuses, and of headache, choked disk, slight temperature rise and leucocytosis, plus focal symptoms. These can be made sufficiently early for surgical intervention to give a fair chance of recovery. Because of a more or less absence of focal symptoms, abscess of the frontal lobe is likely to be overlooked until too late for surgical interference to save the patient. Persistent headache in the presence of infection of the sinus of the ethmoid or orbit, with good drainage, points strongly to involvement of the frontal lobe. Brain abscess should be differentiated from encephalitis or sinus thrombosis. Lumbar puncture is an aid. A high cell count of leucocytes points to meningitis, while a slight increase of lymphocites points to encephalitis. The surgical principles for treatment are the same as for pus anywhere, but the means of evacuation and after treatment are very different. Kerr draws the following conclusions:

1. Brain abscesses in general are difficult of diagnosis and especially difficult of treatment.
2. Abscess of the frontal lobe of the brain has been recognized before death in only about one-half of the reported cases.
3. The high mortality indicates the need of more careful study of these cases.
4. Persistent headache with sustained leucocytosis and especially the presence of retinal changes, indicative of pressure, in cases of drained frontal sinusitis or ethmoiditis indicate exploration.
5. Exploration by a two stage operation through a sterile field may be indicated.
6. Direct drainage with minimum trauma, should be established and should not be disturbed until all symptoms have subsided.
7. It is of paramount importance to drain an abscess for too long rather than too short a time.

POST-OPERATIVE CHEST CONDITIONS.—Thompson, H. T. Edin. Med. J., June 1921. Edited by Ochsner, Yearbook 1922.

The author points out that patients who are old or of a certain type, if forced to lie in bed, tend to develop congestion, etc., in the lungs. He calls attention to the chilling of the patient under-

going operation, the temperature of the room, the exposure of the body surface and the coils of the intestine to the air, profuse perspiration and the danger of chilling the patient in transit to bed. These are all to be thought of and adequate measures taken to prevent them. Careful attention to detail is necessary to prevent the distinct risks of chilling and depression of vitality, and one of the effects of these may be the development of a patch of pneumonia congestion or bronchitis. His deductions leave little doubt in his mind but that the anesthetic does play a part and especially so with ether. He deems it important to hesitate before giving ether to a person suffering from or who has recently suffered from bronchitis; be sure that the ether is pure and guard against the possibility of a chill: He questions whether the warming of the vapor acts by preventing the lowering of the body temperature, and it is much more important to attend to the general warmth of the patient: The preliminary administration of atropine is especially important in ether anesthesia. To these precautions Ochsner adds the following, which he says serves to reduce, to a minimum, the occurrence of ether pneumonia.

1. The patient should be thoroughly under the influence of the anesthesia before the operation is begun.

2. It should entirely be stopped and the patient permitted to breathe pure air some time before the operation is completed.

3. The moment the slightest respiratory disturbance occurs after the operation, the head of the bed should be elevated 12 to 18 inches. This will insure—

A. The smallest amount of ether to be given, because the operation continues with addition of very little ether.

B. The patient exhales much of the ether inhaled while the wound is being sutured, and returns to bed not saturated with the drug.

C. The element of pulmonary congestion is eliminated by the position of the patient and this will prevent the occurrence of pneumonia, in almost every case in which otherwise it might be expected.

BACTERIOLOGY and PATHOLOGY

Edited by Wm. H. Bailey, A.B., M.D.
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BACTERIOPHAGE, D'HERELLE'S PHENOMENON (Bacteriolysis).—F. d'Herelle, Brit. Med. Jour., London, Aug. 19, 1922.

"The bacteriolysis produced under the influence of the principle named bacteriophage consists in a total dissolution of the microbial body, at the end of this action there remains no visible residue." "Four hypotheses are considered concerning the source of these enzymes: 1. The enzyme may be derived from the animal organism which is attacked by the given bacteria, and would then be the result of a defensive reaction on the part of the organism. 2. They may come from the intestinal bacteria as a result of a microbial antagonism. 3. They may be secreted by the bacterium itself which undergoes the lysis, and would therefore be of the nature of autolysins. 4. They may be secreted by an ultra-microscopic virus, which is a parasite of bacteria, as the author believes." "The ultra-microscopic corpuscles possess a variable virulence, and by successive passages, it is possible to increase the virulence of a feeble strain of bacteriophage; experience shows that bacteria attacked by bacteriophage do not remain passive; they protect themselves and are even able, under certain conditions, of acquiring an immunity towards the parasite. The behavior of bacteriophage towards physical and chemical reagents is that of a living being, as it does not agree with that of an enzyme. It is possible to extract the lytic enzyme from the living bacteriophagic microorganisms." "The author does not specify the species to which the ultra-microscopic organism belongs, all that is known is that it is a filtrable virus parasite of bacteria, endowed with the function of assimilation and reproduction."

"F. W. Twort (in the same Journal), The conclusion drawn is that it seems probable, though by no means certain, that the active lytic material is produced by the micrococcus, and since it leads to its own destruction and can be transferred to fresh, healthy cultures, it might be considered almost as an acute infectious disease of the micrococci. Where the differences of opinion have existed, the controversy has centered around the experiments carried out to determine the source and nature of the lytic material."

"J. Bordet, (in the same Journal), was the first to advocate that the lytic principle was reproduced by the microbe itself which shows the lysis, in other words that the transmissible lysis is in reality an autolysis betraying a nutritive vitiation primarily started by external influences.'

THE RELATION OF VITAMINS TO THE GROWTH OF A STREPTOCOCCUS.—S. Henry Ayers and Courtland S. Mudge, Jour. Bacteriol., Sept. 1922.

"The authors experimented with the water-soluble vitamin B. and the fat-soluble vitamin A in their relation to the growth of a pathogenic streptococcus. Their results led the authors to conclude that water-soluble vitamin B is not the growth promoting substance of yeast, at least for the streptococcus used in their work, and that the growth noted when small amounts of fats or oils were added to the media was not due to the fat-soluble vitamin A." These experiments would seem to indicate that the vitamins, which have such a definite and important influence on the growth of man and animals do not occupy the same role in influencing the growth of bacteria.

ACTINOMYCOSIS IN A FOSSIL RHINOCEROS. —Roy L. Moodie, Jour. Parasitol., Sept. 1922.

"The jaw of a fossil rhinoceros from the Pliocene formations in the northwestern part of Nebraska shows a diseased condition of the bone which has all the appearance of an actinimycotic osteitis or 'lumpy jaw.' Dr. Moody has done quite a lot of research along the line of fossil evidence of bacterial existence in prehistoric animals. Practically all of this data is confined to the pathological changes in bones and cartilage as by far the greatest amount of material found is of these structures. It has opened a wide field of investigation and demonstrates the vast age of these enemies of man and animals.

PROPHYLACTIC TREATMENT OF RABIES BY MEANS OF STANDARD GLYCERINATED VIRUS.—Jas. McI. Phillips, Jour. Immunol., Sept. 1922.

"The author's studies indicate that heat, oxygen, light, moisture and various chemical substances cause the loss of virulence in vaccines for rabies, as they are usually prepared today. When these factors are removed the virus has remained virulent for a period of five years. When the rabbit that is 'coming down' is moribund, it is killed by bleeding as this reduces the amount of protein in each therapeutic dose of the vaccine and reduces the amount of local reaction. The brain alone is used for the vaccine, it is emulsified with glycerine, put into amber glass ampules which are not sealed but are placed in separate test tubes which are rendered anaerobic by the use of pyrogallic acid and caustic potash solution, similar to the method used for bacteriological cultures. These are stored in the ice box, when they are to be used, the emulsion is made up to the proper dilution with physiological salt solution to which 0.5 per cent phenol has been added. This solution is then placed in ampules for the individual doses and dispensed in the usual manner."

MENACE OF THE UNVACCINATED.—Victor G. Heiser, M. D. Journal A. M. A., Sept. 29, 1923.

The anti-vaccinationists of the past have contributed largely to the death rate from smallpox. We have the future before us. Shall we allow a few fanatics with their unproved allegations, to spread disfiguration, blindness and death to innocent victims? Smallpox is increasing in virulence and was 75 times as dangerous in 1922 as in 1920. Immigrants are a huge menace.

Denver, Colorado, has a large unvaccinated population. From September to November 1922, 123 persons died of smallpox; 100 of these had never been vaccinated and the other 13 had not been vaccinated for 20 years. Denver also furnished additional evidence of the virulence of the disease.

Recently in southern California, chiropractors were responsible for 15 cases and one chiro died of the disease. In Denver a chiro who publicly attacked vaccination contracted smallpox and fled to Biloxi, Mississippi, where he died from the disease after exposing many others and starting an epidemic from which several died. In Kansas City during a serious outbreak of smallpox, all of the physicians except one eclectic, who had not been vaccinated, escaped the disease.

Philippines, prior to occupation by United States, had 40,000 deaths a year from smallpox. The disease was brought under control by vaccination. Later a large number of children were allowed to go unvaccinated and in 1918 50,000 deaths occurred. The epidemic was only checked by effective vaccination in advance of the disease.

Bugaria, Russia, Porto Rico and Cuba have a similar history.

Early historical records show that much of the world's blindness was caused by smallpox. In countries in which the disease goes unchecked, this is still painfully evident. In such countries as the United States, England, and Norway and Sweden where effective vaccination has been carried on, blindness from smallpox has been reduced to very small proportions. In the United States it is rare to see a case. If the disease is allowed to gain a foothold here again we may witness conditions of blindness such as exist in Russia today.

In the history of physicians, nurses and attendants, there is no history of anyone dying who had been vaccinated. If all children were successfully vaccinated, epidemics of smallpox would probably never occur. At present there is an increasing lack of vaccination among school children and we as physicians need to get behind the Boards of Health and bring pressure to bear toward education so that our legislators may pass protective laws in regard to vaccination.

There is practically no risk in the use of the modern vaccines and there is no justification for a condition that will permit fifty times as much smallpox in one state as in another, as the disease is within our control.

SMALLPOX AND VACCINATION.—J. P. Leake, M.D. and John M. Force, M.D., Surgeon and Special Expert, respectively, of U. S. Public Health Service, Washington, D. C.. Journal A. M. A., Sept. 29, 1923.

This article is like that of Dr. Heiser, a plea for more effective vaccination. And the authors say that every practitioner should familiarize themselves with the disease in all of its manifestations. There have been many epidemics which were diagnosed by many different names but experts claim that all of the new terms such as alastrin, kaffir milk pox, etc., are but mild cases of true smallpox and that great harm is done because they are not truly diagnosed and vaccinated against. Measures which are completely successful against the mild types are not completely successful against the virulent types. The duration of immunity is shorter in some persons than in others and negroes have a very short duration of immunity. It is generally safe to say that if everyone were vaccinated in early childhood and then every seven to fourteen years thereafter, it would practically control epidemics. If virulent smallpox breaks out in a community, people should be re-vaccinated with potent virus even though they were vaccinated a year before because of the difference in time of immunity for different individuals.

EYE, EAR, NOSE AND THROAT

Edited by Jas. C. Braswell, M. D.
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CHRONIC SUPPURATIVE OTITIS MEDIA.—Bozer, H. E. Ann. Otol., Rhinol., & Laryngol., 1923, xxxii, 277.

Bozer studied the results in the treatment of 190 cases of chronic suppurative otitis media to determine the value of local treatment. The cases were classified into four groups.

The method of treatment was the so-called dry treatment, using local applications of alcohol, antiseptics and caustics. All of the treatment was carried out in the office, the patient not being permitted to use any form of treatment at home.

The duration of the treatment averaged about four weeks. The severe or bad types in which

marked bone destruction was noticed when first examined frequently responded to treatment within a relatively short period.

The author thinks that many so-called chronic ears should be handled by the very conservative method of local treatment. Should such a method fail a radical mastoid may then be considered. Many cases of discharging ears can be successfully handled by the conservative method and thereby avoid the hurried mastoid.

Care in blowing the nose is essential in keeping the ear dry after being treated.

ONE HUNDRED CASES OF LARYNGEAL GROWTHS REMOVED BY INDIRECT LARYNGOSCOPY.—Wylie, A. Internat. J. Surg., 1923, xxxvi, 244.

The author urges the removal of laryngeal growths by the indirect method and reports 100 cases. By this method the growth is removed with very little discomfort to the patient and without injury to the larynx. The operation can be performed in the office.

Several days prior to the operation, small doses of potassium bromide should be administered to relieve mental strain and half hour before operation 1-100 grain of atropin should be given to lessen the secretion.

Two minutes before the operation, the pharynx and larynx are sprayed with a 10 per cent freshly prepared solution of cocaine.

MacKenzie's forceps are of value in most cases. Grant's forceps are especially adapted for tumors on the edge of the cords protruding into the lumen of the larynx. The author frequently uses the universal forceps consisting of a Krausse cutting blade on a universal handle.

COMPLICATIONS OF PARANASAL SINUS DISEASE IN INFANTS AND YOUNG CHILDREN.—Dean, L. W. Ann. Otol., Rhinol., & Laryngol. 1923, xxxii, 285.

The failure to recognize early nasal infections in children may lead to severe infections of the sinus' and complications leading to severe deformities may occur.

Bronchitis is a common result of paranasal sinus disease in infants and very young children. Arthritis, a frequent and serious complication, clears up if the sinus infection is recognized early and treated. Asthma and pneumonia are frequently the result of some sinus infection in children.

Headache is characteristic of sinus disease in young children. The headache is usually frontal and attributed by the parents to eye strain. Other symptoms of sinus disease are nasal stoppage and a feeling of fullness in the head.

Gastro-intestinal disturbance is an important complication and should not be overlooked. It is usually so severe that it is thought to be the primary trouble. It is questionable whether this condition is due to swallowing the nasal discharge or to the elimination of bacterial products through the gastro-intestinal tract.

THE REMOVAL OF TONSILS.—B. R. Shurley. J. Am. M. Ass., lxxxi, 1923, 800.

In spite of the years of research, the physiologic function of the tonsil remains a study and a choice of theories. The school of experience has taught that certain methods and anaesthetics are dangerous or failures.

The roentgen-ray method of treating tonsils will not supplant the safe operative methods but may find a limited field of usefulness in the class of cases described as bad operative risks.

Tonsillectomy is a major and hospital operation.

Ether is the choice of anaesthesia for children and the reclining position lessens danger.

The Sluder enucleation method is best for children and the tonsil knife or scissors is preferable in adults.

In adults, procain, 0.5 per cent, the sitting position and dissection are most advantageous.

ARSPHENAMIN TREATMENT OF SPIROCHAETIC GINGIVITIS.—Kolmer, J. A. Am. J. Clin. Med., 1923, xxx, 243.

The author has found that the local application of a 1 per cent solution of arsphenamin in the treatment of spirchaetic gingivitis, pyorrhea alveolaris or Riggs' disease is very efficient. Neoarsphenamin should be used in a 2 per cent solution. The arsphenamin solution should be the usual alkaline solution.

The drug is best applied by means of a syringe using one subic centimeter of either solution. Six to ten daily treatments are usually sufficient. If bacterial activity is suspected, iodine, mercurophen, or silver solutions should be used in conjunction with the arsenical preparations. A solution consisting of a mixture of equal parts of a 1 per cent solution of arsphenamin and a 1:1000 solution of mercurophen is advised for treating the double infections.

GENERAL MEDICINE

Edited by Wann Langston, M. D.
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FOOD ALLERGY AS A CAUSE OF ILLNESS.—W. W. Duke, J. A. M. A., Sept. 15, 1923.

A rather large proportion of persons are born with a constitution which makes it possible for them to become hypersensitive to foreign substances. This constitution is hereditary as a positive history can be obtained in one or both parents in about fifty percent of cases. Once sensitive, a person is likely to react in characteristic way whenever he comes in intimate contact with the substances to which he is sensitive. The condition is common and affects about ten percent of all persons.

Foods which sensitize human beings may be either protein or non protein, organic or inorganic. Some foods, such as sea foods, have a greater faculty for sensitizing than others such as commonly eaten, meats, fruits or vegetables. Sensitiveness to foreign matter is often very specific. Persons are frequently sensitive to a protien common to several foods which are related biologically. Specifity is more striking in the case of sensitiveness to air-carried allergens than it is in the case of sensitiveness of foods.

A patient is not made ill by all the foods to which he is actually sensitive and to which he gives skin tests. The time at which reactions occur varies in different patients, although it may be remarkably constant in a given case. The

degree to which patients react to food is remarkably constant in some persons and varies greatly in others.

When a person is sensitive to food, illness may be caused in five important ways: (1) A reaction, confined to the gastro-intestinal tract may occur as a result of direct contact between the gastro-intestinal mucous membrane and the product to which it is sensitive. (2) Disorder in the gastro-intestinal tract or in distant organs occurs as part of a general reaction to a food after it has been absorbed and distributed by the blood. (3) When an organ is in an irritable state as a result of reaction, it is unduly disturbed by mechanical, chemical or thermic irritants, by functional activity, by abnormal reflexes, and by other disease that may coexist. (4) Illness in no wise related to allergy is occasionally made worse by reaction to foods. (5) Definite organic disease may occur as a result of an acute or chronic state of reaction.

Symptoms may be divided into two classes, those due to direct contact between a food and the gastro-intestinal mucus membrane, and those which occur as a part of a general reaction. Reactions may be due to common or uncommon articles of diet. The gastro-intestinal, ocular, nasal, pharyngeal, bronchial and cutaneous symptoms can occur either as a result of direct contact with an offending substance or as part of a general reaction. The neuralgic symptoms, joint symptoms, bladder symptoms, hypotension, eosinophilia, hives and angioneurotic edema can occur under ordinary conditions only as part of a general reaction caused by an allergen which has been distributed by the blood. The abdominal symptoms are abdominal pain, which may be either steady or griping. Other alimentary symptoms of interest are dyspepsia, nausea, vomiting, bloating, diarrhea and mucous colitis, acute or chronic.

Treatment may be by (1) avoidance of the offending food; (2) specific protein treatment; (3) non-specific protein treatment, and (4) symptonic treatment with epinephren and atropin—useful in emergencies and for temporary relief.

FOCAL INFECTIONS IN RELATION TO SYSTEMIC DISEASES.—W. G. Thompson, M. D., Boston, M. S. J., August 23, 1923.

Owing to many difficulties, it is impossible as yet to give statistics concerning the relative frequency of systemic symptoms in relation to the different sources of focal infections. The author's impression is that the tonsils and teeth are responsible for the great majority, with the emphasis upon the teeth. The nasal sinuses, when chronically infected, are a menace for many respiratory diseases but less liable to affect the heart or cause arthritis. Prostatic abscess also may give rise to quite remote symptoms, including lesions of the joints.

The most common of all local infections are a variety of nerve, muscle and joint, ranging from neuralgia, neuritis, sciatics and myositis, to arthritis, synovitis, bursitis and possibly the so-called arthritis deformans. It is most desirable in all such cases to carefully examine the mouth and wherever extensive pyorrhea, decayed stumps of teeth and capped-over teeth are found to refer the patient for dental treatment, and insist further upon having X-Ray pictures sent back by the dentist. This often reveals much focal infection. In many instances, long standing neuritis or sciatica, previously rebellious to medicinal remedies, have entirely disappeared with no treatment other than cleaning out a hidden pus pocket or scraping out an area of necrotic bone.

Another less common but more serious type of cases are those in which a degree of anemia ensues, with or without a generalized septicemia. In these instances various types of streptococci and staphylococci may be demonstrated and particularly the viridans.

Another different group of focal infections is that in which the circulation becomes involved with the exclusion of other symptoms. This is very noticeable in the aged who are neglectful of mouth hygiene. Here cardiac arrhythmia and general enfeeblement of the circulation may sometimes entirely disappear when an extensive pyorrhea or a series of decayed tooth roots are treated antiseptically.

The influence of focal infection upon psychosis is interesting. It is a matter of increasing experience that attention to hygiene of the tonsils and teeth often has a decided and immediate effect in improving the mental state in a marked degree. There is a possibility that the improvement may result from betterment of digestion and lessening nonseptic toxemia, rather than from elimination of bacterial focal infection. Psychotic patients usually neglect the care of their mouths. From such mouths, both hemolytic and non-hemolytic, bacterial strains frequently may be derived from both tonsils and teeth. Secondary infections of the alimentary canal may arise from swallowing these types of bacteria developing in the mouth, setting up new foci of infection in the digestive organs.

With regard to the treatment of focal infections there are several features which should be emphasized. Diligent search should be made for the original focus, bearing in mind that there may be more than one sure source of infection present. Mouth infection frequently results in various digestive disorders. In such cases attention to digestion and intestinal asepsis is important, the latter to be obtained through the so-called intestinal antiseptics, such as creosote, salol, beta-napthol, etc., and especially through colonic irrigation. In cases in which an extreme degree of anaemic and other symptoms of profound general sepsis have resulted, blood transfusion should be practiced and with exceeding expert procedure. Another means of treatment is through the administration of autogenous vaccines, where material is obtainable from which to make them. This is again an expert procedure and often fails through lack of skill in obtaining and making cultures.

AN ESTIMATE OF THE INFORMATION DERIVED FROM THE USE OF TESTS FOR RENAL FUNCTION.—W. T. Longcope, Boston, M. & S. J., August 23, 1923.

The methods that have been developed to estimate the functional activity of the kidney depend essentially upon four types of technical procedure.

(1) The determination of the rate of excretion in the urine of certain known chemical substances which are injected beneath the skin or taken by mouth. The substances that have been most widely employed are phenolsulphonephthalein, lactose and potassium iodide. The use of potassium iodide

and lactose has now largely been abandoned. The phenolsulphonephthalein test of Towntree and Gerathy is very widely used.

(2) The determination of the specific gravity of the urine, together with the sodium chloride and nitrogen content in specimens collected at two-hour intervals during the day with the patient on a special diet. At night one ten hour specimen is collected and analyzed, a comparison of the day and night amount is of value. This renal test meal, devised by Schlayer and Hedinger and modified for use in this country by Mosenthal and Christian, is of much value as a test for early renal disturbance.

(3) The determination of the changes in the amount of normal metabolic products and salts in the blood, including uric acid, urea, non protein nitrogen, creatinine, glucose, chlorides, inorganic phosphates and sulphates. The methods of blood analysis devised and developed by Marshal, Van Slyke, Folin and Wu, Deneis, Meyer and Kramer, have made available a technique for study of the chemical constituents of the blood which has added an enormous amount of detailed information concerning the changes that take place in the blood chemistry during disease.

(4) The determination of the ratio between the concentration of such metabolic products as urea in the blood and the rate of its excretion in the urine. The original technique and formula devised by Ambard for the determination of the index of urea excretion was later modified by McLean in this country and was for some time employed quite extensively.

Of the four types of tests, the ones that have been most widely used are first, an estimation of the phthalein excretion; second, the renal test meal, and third, the determination of the concentration of the chemical constituents of the blood. Of these the most important are urea, non protein, nitrogen, uric acid, creatinine and the CO_2 combining power of the blood, which excluding other causes for acidosis, gives an indirect measure of the phosphate. The normal function of the kidney may be disturbed in other conditions than nephritis, such as chronic passive congestion that comes from cardiac failure. If the chronic passive congestion is combined with a low blood pressure, the conditions are present that disturb the renal secretion. The oliguria, albuminuria, and even hematuria of chronic passive congestion are familiar. Under these conditions it has been found that the excretion of phthalein may be much diminished and that the non protein nitrogen of urea of the blood may be somewhat elevated above normal. At the same time the specific gravity in the two hour test may be fixed at a high level and the excretion of chlorides diminished with the restitution of the circulation, the congestion is relieved and the renal function in uncomplicated cases returns to normal.

In pernicious anemia, the kidney function as measured by one of these tests may be definitely impaired. The Mosenthal findings may be identical with those in chronic nephritis and there may not be an impairment of the excretion of phthalein.

In the acute forms of nephritis the tests are not needed for diagnosis. In one group with anasarca, low blood pressure and marked albuminuria, all tests for renal function may be normal save for oliguria and marked retention of chlorides. In another type of acute nephritis there may be notable and rapid changes particularly in the blood chemistry. The acute onset may or may not be attended with oedema, but is often associated with an increase in blood pressure, albuminuria and haematuria. A study of renal functions may be of value in prognosis in cases of hypertensive nephritis. In early stages of the disease, the blood pressure is high, the uric acid, urea and non-protein nitrogen of the blood may rise to highly abnormal and even the acid phosphates may increase and cause varying degrees of acidosis, while the urine may show fixation of specific gravity at a high level. In spite of these abnormalities the phenolsuphonephthalein may excreted in perfectly normal quantities.

The functional tests are also of value in giving information concerning the progress from an acute, through a sub-acute stage of the disease to a chronic phase, that may soon terminate fatally. One of the most useful purposes of these tests is to detect the early changes in secretory activities of the kidney in progressive chronic nephritis, which is satisfactorily done by the determination of the ability of the kidney to concentrate the salts and waste products which it excretes.

TUBERCULOSIS

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VACCINES IN THE TREATMENT OF THE SECONDARY INFECTIONS IN PULMONARY TUBERCULOSIS.—Cocke, Southern Medical Journal, Oct. 1923.

In spite of the many disappointments of the past, enthusiastic workers are still hopeful of finding a specific for pulmonary tuberculosis. Although no one has been able to definitely prove the full extent, danger and damage of a mixed or secondary infection in tuberculosis, all workers are more or less of the opinion that such an infection has a greater or lesser importance. One point of agreement is that with the progress of the disease this infection is always present in increasing effect. However, it is generally accepted that practically all the symptoms and pathological changes commonly associated with secondary infections may occur as a result of tuberculous infection alone; and it is definitely known that these secondary organisms are not necessary to the production of pulmonary tuberculosis.

Pettit and Brown and their co-workers have shown that with the progress of the disease there is also an increasing incidence of secondary infection in the blood stream, but have not been able to determine its importance in symptomatology and pathology. Patterson is inclined to attribute little, if any, influence to the secondary infection in the progress of tuberculosis and expects very little help from the use of autogenous vaccines. Pottinger, while at one time a staunch believer in mixed infection being an important process in all advanced cases of pulmonary tuberculosis, is gradually becoming of the opinion that associated bacteria are comparatively an unimportant part of the pathology of tuberculosis. Fishberg is inclined to the belief that while mixed infections are very frequent in tuberculosis, the contaminating micro-organisms are not responsible for most of the symptoms of the disease. Corper and Enright concluded after the study of direct cultures, inoculation experiments and the saliva of the nor-

mal individual that the organisms in the sputum in pulmonary tuberculosis ordinarily play an important part in the disease. While Norris and Landis state; It is the present day belief that the formation of a cavity is due in a large part to the presence of secondary infection with various pus-producing organisms. These organisms produce a liquifying necrosis of the caseous areas and thus hasten their break down. Brown and his co-workers state that while they believe they can prove the occurrence of secondary invasion by various organisms, they have not as yet been able to be sure that such secondary infections play constantly a part in the progress of pulmonary tuberculosis.

So after a careful study of the works of these men, we are still uncertain as to the importance of secondary infections in pulmonary tuberculosis and are therefore confronted by the problem of making a vaccine which will contain the invading organisms in the proper proportion to effect immune response and hence benefit the patient and be of no danger to him; so it would seem that we are hardly justified in the use of autogenous vaccines unless we believe with some that the success of vaccine therapy is due to the non-specific protein reaction, and that immunization must not of necessity be strictly specific.

Weaver points out that streptococcus vaccines should always be autogenous inasmuch as the various strains of streptococci differ among themselves in essential immunological peculiarities. A polyvalent streptococcic vaccine against all types of streptococci would of necessity have to contain so many strains as to make it practically valueless, because this multiplication of strains would necessarily so reduce the content of the essential one as to render it therapeutically inert.

The author is of the opinon that stock vaccines should only be used when it is impossible to secure autogenous vaccines.

Different workers report the use of autogenous vaccines with varying degrees of success, but it is the concensus of opinion that they should be used in combating secondary infections in pulmonary tuberculosis only in such cases as have failed to respond to the more conservative measures, and then they are to be used with caution.

LOWER LOBE PULMONARY TUBERCULOSIS.—Wm. S. Middleton, American Review of Tuberculosis, July, 1923.

The author presents four cases of pulmonary tuberculosis in which the significant physical signs were in the basal lobes. In none of these cases were there signs of pathological changes in the apices on physical examination. Tubercle bacilli were found in the sputum in all cases.

These cases are presented in order to emphasize the dangers of generalization in the field of diagnosis. He concludes that while the arguments for a regular order of tuberculous involvement in the lung are based on the observation of thousands of cases, there are exceptions where evident signs of pulmonary tuberculosis are overwhelmingly or entirely basal, and opposing the rule, lower lobe involvement may be much more advanced than the upper lobe forms. Thus persistence in inflexible rules of diagnosis may lead to serious errors in diagnosis and prognosis.

THE WILDBOLZ AUTO-URINE TEST FOR ACTIVITY IN TUBERCULOSIS.—John H. Korns, American Review of Tuberculosis, July, 1923.

Wildbolz assumes as the basis for his test three things, (1) that there are present split products of tubercle bacilli in the urine of those harboring an active tuberculous focus in the body; (2) that these products are responsible for a specific reaction of infiltration and redness when the urine is injected intracuteaneously in a person allergic to tuberculin; and (3) that when the disease becomes inactive, decomposition products of the bacilli cease being excreted in the urine and the auto-urine test in consequence becomes negative.

The author's series of tests was carefully done, the preparation of the urine being supervised and the injections and readings being made by the same person throughout. Wildbolz's technique was used in 49 cases while Bergen's was used in the other 32. Of the 33 cases considered actively tuberculous, 29 agreed with Wildbolz's results and 4 disagreed. Of the 48 considered non-tuberculous, 31 gave negative and 17 positive results. Thus 74 per cent agreed with and 26 per cent disagreed with Wildbolz's findings.

Certain theoretical considerations are presented which lead the author to question the specificity of the test. In its present form it is not practically helpful as it requires a considerable amount of apparatus and is time consuming, with great chances for technical error. It is also unsafe in doubtful cases to use it as a criterion of activity.

THE WILDBOLZ AUTO-URINE REACTION.—J. M. Haymon, Jr. American Review of Tuberculosis, July 1923.

The technique used, that of Gibson and Carroll, which includes some slight modifications of Wildbolz's original method, is described in detail. The series of 75 cases consisted of 38 cases of proved tuberculosis, 7 doubtful and 30 supposedly non-tuberculous patients as controls. 29 or 76.3 per cent of the 38 proved tuberculous patients gave a positive reaction, 3 or 7.8 per cent a doubtfully positive and 6 or 15.8 per cent a negative. Of the 30 control cases, 23 or 76.7 per cent gave a negative test, 6 or 20 per cent a doubtful and 1 or 3.3 per cent a positive.

Haymon believes that a definitely positive result properly controlled is indicative of active tuberculosis, that a negative test is of less value unless repeated and that doubtful reactions must be interpreted with great care and are of little diagnostic value.

The test, while theoretically sound, is beset with so many sources of error on account of the numerous details and difficulties in preparing the urine for the test and interpretation of reactions, that little reliance can be placed upon it at present. It is worthy of further trial and an attempt should be made to devise a simpler and more reliable technique.

SO-CALLED SELECTIVE COLLAPSE IN ARTIFICIAL PNEUMOTHORAX.—Hennell and Stivelman, American Review of Tuberculosis, July 1923.

By the term selective collapse is meant the tendency of the injected air to accumulate about the diseased part of the lung as if selectively collaps-

ing it, and leaving the healthy portions relatively uneffected.

This is due to the fact that there is an early dimunition in compressibility and elasticity in diseased lung tissue. For this reason the diseased portion while being less compressible than the surrounding normal tissue, will respond less readily and completely on absorption of the induced pneumothorax.

After a study of a series of cases the authors state their opinion that the involved portions of the lung can be fairly well collapsed with all the resultant good effects, with pressure so low as to interfere little, if any, with the functions of the surrounding normal tissue.

By this method induced pneumothorax can be employed in the treatment of a much larger group of cases than would be possible were a complete collapse to be used. It also gives more perfect control over the pneumothorax with reference to ultimate re-expansion of the lung, with the possibility of avoiding chest deformity and the elimination of the danger of reactivating dormant foci. There remains, however, a certain group of cases with a fixed mediastinum tendency to pleural obliteration, extensive disease in all lobes of the treated lung and active thick-walled cavities, where the use of very high positive pressure is necessary.

THE PRIMARY COMPLEX IN HUMAN TUBERCULOSIS AND ITS SIGNIFICANCE.—Anton Ghon, American Review of Tuberculosis.

By the term complex is meant that "definitely circumscribed" picture consisting of the primary focus of infection and the changes in the regional lymph nodes. According to Parrot every primary lung infection shows itself in the regional lymph nodes. These changes follow in their topography certain laws which correspond with the laws holding good for the lymph drainage under normal conditions, and may be present in varying quantities. This complex is present even in primary extra-pulmonary tuberculous infections, follows the same laws and shows the same anatomic changes.

These facts give valuable points to the pathologist and clinician in determining the portal of entry. The primary complex also constitutes the determining factor for the immunological relations of the body since the longer the primary infection remains a localized process the slower it extends to the regional lymph system and later gives rise to generalization.

ORTHOPAEDIC SURGERY

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1. ORTHOPEDIC PRINCIPLES.—"Menders of the Maimed," by Arthur Keith, M.D., F.R.C.S., L.L.D.

A book published in London in 1919, devoted to the history and development of Anatomical and Physiological Principles which underlie the treatment of injuries of muscles, nerves, bones and joints. His discourse assumes that of a historian and biographer, relating the developing of Orthopedic surgery to the personality of each great student of Medicine as his life and scientific investigations brought to light some new angle of importance.

Starting with John Hunter he connects each school of scientific investigations relating their influence on each other, finally presenting American leaders of the past and present.

It is a book that every surgeon who does extremity surgery at all, should read. It is thought that abstracts from the book will be of interest in this section and will appear for the next few months under the heading of "Orthopedic Principles."

2. HIP JOINT.—Flattened Hip Socket and its Sequelae. Dr. Murk Jensen's Journal Bone and Joint Surgery, July 1923. Vol. V., No. 3-528.

This article is a further discussion of Dr. Jensen's theory regarding so-called Perthes Disease of the hip joint. By means of diagrammatic reasoning, he further explains how the epiphyseal head of the femur becomes flattened, the femoral neck becomes thickned, and the final picture of the condition arises as the result of mechanical disturbances through the force of gravity. He admits that injury, or intercurrent disease, which other authors claim is the sole cause, may have its influences in hastening its process.

His theory is, that if the acetabulum is flattened, pressure on the epiphyseal head of the femur causes it to flatten out and become displaced, giving it the characteristic appearance. He reviews some statements that he has made previously regarding the effect of enfeeblement upon bone growth and also the part muscular stress plays in aiding the force of gravity. Many beautiful photos accompany the article and are worthy of study.

3. FRACTURE CLAVICLE.—W. L. Bell, Annals of Surgery, Nov. 1922.

In the treatment of fracture of the clavicle, the use of plaster paris has given way to adhesive plaster and splints. Dr. Bell describes a unique method which seems practical. He makes a circular cast on the chest from axilla to waist line. Then the arm is enclosed in plaster to the elbow. On the following day the arm and shoulder carrying the outer fragment of the clavicle is extended, while making counterpressure on the chest, outward, upward, and backward. The gap is covered by plaster and held firmly until set.

4. INFANTILE PARALYSIS.—Hamstring Transplantation for Quadriceps Paralysis. Paul C. Colona. New York Journal Bone and Joint Surgery, July 1923. Vol. V. No. 3.

He makes an analysis of 101 cases of hamstring transplantation operated at the Hospital for Ruptured and Crippled, New York. He tabulates end results as he found them in 24 cases personally examined. The technique employed in these cases was that whereby the biceps freed from its insertion and re-inserted into the patella to replace the paralyzed quadriceps, as described and employed by Dr. Royal Whitman of New York.

He concludes that satisfactory functional results are the rule. The biceps is better to use than the inner hamstring. He warns that accompanying deformity should be corrected before transplantation, and that negative results are apt to follow if the extensors of the hip are also paralyzed.

CURRENT COMMENT

By The Editor,
Dr. Claude A. Thompson, Muskogee

Which has nothing, or nearly so, to do with matters medical, but which reflects current opinion, belief and comment upon the order of the day, whatever or wherever it may be. Contributions are invited from our members.

CAN THE LEAGUE DO ANYTHING?

"Hints have been thrown out that Great Britain, failing to achieve an accord among the Allies, might attempt to bring the whole question of reparations and a settlement with Germany before the League of Nations. If Great Britain does not do so, one of the neutral nations is practically certain to make the attempt. as Sweden did this spring. France would probably oppose any intervention by the League; but it is at least open to question whether France would stand out absolutely against the majority opinion of the world which any decision by the League would represent. As the Council and the Assembly meet, the League will face the greatest test it has yet had as to what it can do to cure the malady of war, now threatening the very life of European civilization. Many Americans are profoundly and sincerely distrustful of the League, skeptical of its powers. But it is evident that our ideas of international arbitration of the reparations problem or a general accord to guarantee security and limit fighting strength, such as the Washington Conference achieved, have little chance of acceptance in Europe today. The League of Nations remains as the only existing agency for mediation.

"Whatever else may be said for or against it, the League represents the one organized endeavor for rational united action in a time of chaotic and menacing struggle. Americans will watch with keener interest than ever before what the League does—particularly with reference to our pressing concern over what our own international policy should be. It may prove that President Harding's step toward restatement of his policy, in his final undelivered address, and Lord Robert Cecil's plan for mutual guarantees and limitation of armament, which would considerably modify Article X of the League, will point the way toward co-operation in doing America's full part to promote world peace."—Our World, Sept. 23.

THE INDIAN PROBLEM, according to Honorable Clyde M. Kelly, Member of Congress, Thirtieth District, Pennsylvania, is everything except what bureaucratic Washington says it is. Quoting statements in part from Mr. Kelly, we find he has this to say:

Bureau Injures Indian

"I deny that this $13,000,000 appropriation benefits the Indians. I propose to prove that to the satisfaction of any person save those who may profit from the present bureau system. I believe that the Indian would be better off today if the Indian Bureau had been abolished twenty-five years ago.

Here are 300,000 human beings of a race which for ninety years has been under complete control of the Indian Bureau. During that time they have been forcibly driven off their homelands of the Eastern States and herded into reservations west of the Mississippi. These reservations **whose bounds were laid out in sacred treaties** have been cut in two, oftentimes without a word to the Indians concerned. **Not a treaty made by the United States Government with the Indians has been kept** and these acts of faithlessness have either been initiated or approved by the Indian Bureau—this alleged protector of a helpless people!"

The Indian reservations, diminished even as they have been, have become very valuable. The building up of the West has added to the value of every acre. On some reservations great oil deposits have been discovered and minerals of various kinds have been found. There are valuable forests on others.

"Not because of the Indian Bureau but because of the national growth of America, **and in spite of the Indian Bureau,** the lands still left to the Indians became valuable.

In all, the 50,000 and more families under the control of the Indian Bureau have lands and other property worth a billion dollars today.

That means that every Indian family possesses wealth to the extent of $15,000 and more. It means an average income of $900 for every Indian family, which is more than the average income for all the families of the United States.

These Indians, possessors of this great wealth, **are starving for lack of the necessaries of life.** Economically independent, the Indian is still kept dangling to a pauperizing, degrading bureau system. Does it benefit the Indian to have bureau agents **dissipate his property** while they spend **millions of the public tax funds as well?**

It is loudly declared that the great tax appropriations must continue because it would be cruel and brutal to reverse our policy of ninety years. Self-styled "friends of the Indians" cry out that the Indians do not want freedom and its responsibilities. "Oh, no," they exclaim, "The Indians are begging to be allowed to remain under the sheltering wings of the Indian Bureau."

It has cost millions of American dollars to build up that falsehood and foist it upon the American people. The officials of the Indian Bureau know that statement is not true. They know the tricks and schemes and fox-like watchfulness necessary to give it even a semblance of reality. They fight to death any plan to settle the question by fair vote. They oppose any investigation which would show that the wings of the bureau give shelter to the Indians just as the hawk's wings shelter the partridge.

The desires of the American Indians, wherever a free opportunity is given, have always been shown to favor freedom and to oppose bureaucratic control. This fact is so well known to the Indian Bureau that it has for years arrogated to itself the right to supervise and control the election of council members and tribal delegates."

"Japan has retired 850 officers, including seven generals, since August 1922. The Japanese Government has announced that it will shortly discharge from the service 1,371 additional officers, including four generals, and thirty-three major generals. Many retired Officers have entered the Department of Economics of the Imperial University to qualify for civilian occupations."—The Dearborn Independent, July 28.

"Alvin M. Owsley, national commander of the American Legion, says, 'It will take five years to write a sensible law to govern immigration and until that time the United States should bar those who are coming here seeking to avoid the consequences of a war which they brought upon themselves."—The Dearborn Independent, July 28.

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